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CONTENTS.

REPORTS ON THE RESULTS OF DREDGING, UNDER THE SUPERVISION OF ALEXANDER AGASSIZ, IN THE GULF OF MEXICO (1877–78), IN THE CARIBBEAN SEA (1878–79), AND ALONG THE ATLANTIC COAST OF THE UNITED STATES (1880), by the U. S. Coast Survey Steamer "Blake," Lieut.-Com. C. D. Sigsbee, U. S. N., and Com. J. R. Bartlett, U. S. N., Commanding. Published by Permission of Carlile P. Patterson and W. W. Duffield, Superintendents of the U. S. Coast and Geodetic Survey. XXXVI. OCEANIC ICHTHYOLOGY, A TREATISE ON THE DEEP SEA AND PELAGIC FISHES OF THE WORLD, BASED CHIEFLY UPON THE COLLECTIONS MADE BY THE STEAMERS "BLAKE," "ALBATROSS," AND "FISHHAWK," IN THE NORTHWESTERN ATLANTIC, with an Atlas containing 417 Figures. By George Brown Goode and Tarleton H. Bean. Published in Connection with the National Museum and the Smithsonian Institution.

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LIEUT.-COM. C. D. SIGSBEE, U. S. N., AND COM. J. R. BARTLETT, U. S. N., COMMANDING.

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XXXVI.

OCEANIC ICHTHYOLOGY,

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TABLE OF CONTENTS.

Names of genera and species.	Plate and figure.	Page.
INTRODUCTION		III
TABLE OF CONTENTS		IX
LIST OF THE NEW GENERA AND SPECIES WITH ETYMOLOGIES		XXXI
LIST OF PLATES		I*
MARSIPOBRANCHII.		
HYPEROTRETA:		
Myxinidæ—		
Myxine, L.—		
M. glutinosa, L.	I, 1	2
australis, Jenyns	I, 2	3
HYPEROARTIA:		
Petromyzontidæ—		
Petromyzon, Artedi—		
P. marinus, L		4
Bathymyzon, Gill—		
B. Bairdii, Gill		4
ELASMOBRANCHII.		
TECTOSPONDYLI:		
Scymnorhinidæ—		
Scymnorhinus, Cuv.—		
S. lichia, Bonn		7
Somniosus, Le S.—		
S. microcephalus, (Schn.)	III, 8	7
rostratus, (Risso)		8
Echinorhinus, Bl.—		
E. spinosus, Gm	III, 9	8
Etmopteridæ—		
Etmopterus, Raf.—		
E. spinax, L	V, 18	10
pusillus, (Lowe)	11, 5	10
granulosus, Gthr		10
Paracentroscyllium, Alc.—		
P. ornatum, Alc		507
Centroscyllium, M. & H.—		
C. Fabricii, (Rhdt.)	II, 7	11
granulatum, Gthr		11
Scymnodon, B. & C.—		
S. ringens, B. & C	IV, 12	11
Centrophorus, M. & H.—		
C. uyatus, (Raf.)	III, 11	12
lusitanicus, B. & C		12
crepidater, B. & C		13
squamosus, Gmel		13
Dumerilii, (Johnson)		13
calceus, Lowe		14
squamulosus, Gthr		508
foliaceus, Gthr		508
Centroscymnus, B. & C.—		
C. cœlolepis, B. & C	IV, 13	14, 508
obscurus, V		15
Oxynotus, Raf.—		
O. centrina, (L.)	VI, 21	15
ASTEROSPONDYLI:		
Scylliorhinidæ—		
Scylliorhinus, Bl.—		
S. retifer, Garman	IV, 14, 15	16, 508
profundorum, G. & B.	V, 16	17
hispidus, Alc		508
canescens, Gthr.		508
Galeidæ—		
Mustelus—		
M. hinnulus, Bl		
Pseudotriacis, Capello—		
P. microdon, Capello	V, 17	18, 508
Pristiurus, Bon.—		
P. melastomus, (Raf.)	III, 10	20, 508
atlanticus, V	VI, 20	21

Names of genera and species.	Plate and figure.	Page.
ASTEROSPONDYLI—Continued.		
Alopiidæ—		
Alopias—		
A. vulpes, L		
Carchariidæ—		
Carcharias—		
C. glaucus, L		
Cetorhinidæ—		
Cetorhinus, Bl.—		
C. maximus, Gunner	V, 19	21
OPISTHARTHRI:		
Chlamydoselachidæ—		
Chlamydoselachus, Garman—		
C. anguineus, Garman	VI, 22	22, 508
RAIÆ:		
Raiidæ—		
Raia, L.—		
R. radiata, Don	IX, 27	25
Ackleyi, Garman	VII, 23	25
Ackleyi, ornata, Garman		26
plutonia, Garman	VIII, 26	27
circularis, Couch	VIII, 25	27, 508
erinacea, Mitchill		28
hyperborea, Collett	IX, 28	28, 509
lævis, Mitchill	IX, 29	28
granulata, Gill	IX, 30	29
batis, L		29, 509
fullonica, L		29, 509
vomer, Fries		29, 509
nidrosiensis, Collett		29, 590
mamillidens, Ale		508
isotrachys, Gthr		508
lintea, Fries		508
flossada, Risso		
senta		508
aleutica		508
trachura		509
abyssicola		509
Trygonidæ—		
Urolophus karanus		509
Goodei		509
HOLOCEPHALI:		
Chimæridæ—		
Chimæra, L.—		
C. monstrosa, L	X, 31	31, 509
affinis, Capello	X, 32-35	31, 509
Callorhynchus, (Gronov.)—		
C. antarcticus, (Lac.)	X, 36	32
Hydrolagus, Gill—		
H. Colliei, (Bennett)		32
Harriotta, G. & B.—		
H. Raleighana, G. & B	XI, 37-40	33
MALACOPTERYGII:		
Alepocephalidæ—		
Alepocephalus, Risso—		
A. rostratus, Risso	XII, 41	36
Agassizii, G. & B	XIII, 45	37
productus, Gill	XIII, 46	37
niger, Gthr	XIV, 52	38
Bairdii, G. & B	XIII, 47	38, 510
Blanfordii, Ale		36, 509
bicolor, Ale		36, 509
edentulus, Ale		36, 510
tenebrosus		510
Conocara, G. & B.—		
C. MacDonaldi, G. & B	XIII, 48	39
macroptera, (V.), G. & B	XII, 43	39
Bathytroctes, Gthr.—		
B. macrolepis, Gthr	XII, 44	41
stomias, Gilb		510
rostratus, Gthr		41
microlepis, Gthr		42, 510
melanocephalus, V		43
attritus, V		45
squamosus, Ale		40, 510
Talismania, G. & B.—		
T. homoptera, (V.), G. & B		43
antillarum, G. & B	XIV, 49	44
æquatoris, G. & B	XIV, 50	44

Names of genera and species.	Plate and figure.	Page.
MALACOPTERYGII—Continued.		
Alepocephalidæ—Continued.		
Narcetes, Alc.—		
N. eremilas, Alc		45, 510
Platytroctes, Gthr.—		
P. apus, Gthr	XV, 53	46
Xenodermichthys, Gthr.—		
X. nodulosus, Gthr	XVI, 57	46, 510
Aleposomus, Gill—		
A. Copei, Gill	XIV, 51	47
socialis, (V.), G. & B	XVI, 58	48
Güntheri, (Alc.), G. & B		48
Leptoderma, V.—		
L. macrops, V	XV, 56	49
Anomalopterus, V.—		
A. pinguis, V	XV, 54	49
Aulastomatomorpha, Alc.—		
A. phosphorops, Alc	XV, 55	50, 510
Pterothrissidæ (=Bathythrissidæ, Gthr.)—		
Pterothrissus, Hilg.—		
P. gissu, Hilg		51
Argentinidæ—		
Argentina, Art.—		
A. sphyræna, L		51
silus, (Asc.), Nils	XVII, 61	52
striata, G. & B	XVII, 62	52
elongata, Hutton		52
sialis, Gilbert		510
Leuroglossus, Gilb.—		
L. stilbius, Gilb		510
Microstomidæ—		
Microstoma, Cuv.—		
M. rotundatum, (Ris.), Gthr	XVI, 59	53
grœnlandicum, Rhdt (=Nansenia grœnlandica, J. & E.)		53, 510
Bathylagidæ—		
Bathylagus, Gthr.—		
B. atlanticus, Gthr		54
euryops, G. & B	XVII, 63	55
Benedicti, G. & B	XVII, 64	55
antarcticus, Gthr		55
pacificus, Gilb		510
Synodontidæ—		
Synodus, (Gr.), Scop.—		
S. saurus, (L.)		57
atlanticus, Johns		57
intermedius, Spix		57
kaianus, Gthr		57
Bathylaco, G. & B.—		
B. nigricans, G. & B	XVIII, 69	57
Bathysaurus, Gthr.—		
B. ferox, Gthr. (=B. Agassizii, G. & B.)	XVIII, 65, 66	58, 510
mollis, Gthr		59
obtusiristris (Vaillant)		510
Harpodon, Les.—		
H. macrochir, Gthr	XVI, 60	59
squamosus, Alc		59, 510
Aulopidæ—		
Chlorophthalmus, Bon.—		
C. Agassizii, Bon	XIX, 70	60
chalybeius, Goode	XIX, 71	60, 510
productus, Gthr		61
nigripinnis, Gthr		61
truculentus, G. & B	XIX, 72	61
gracilis, Gthr		511
corniger, Alc		511
Benthosauridæ—		
Benthosaurus, G. & B.—		
B. grallator, G. & B	XIX, 73	62
Bathypteroidæ—		
Bathypterois, Gthr.—		
B. longifilis, Gthr		64
dubius, V	XX, 74	64
quadrifilis, Gthr	XX, 75	65
Güntheri, Alc		64, 511
insularum, Alc		64, 511
longipes, Gthr	XX, 76	66, 511
longicauda, Gthr		64
Ipnopidæ—		
Ipnops, Gthr.—		
I. Murrayi, Gthr	XVIII, 67, 68	67

Names of genera and species.	Plate and figure.	Page.
MALACOPTERYGII—Continued.		
Rondeletiidæ—		
Rondeletia, G. & B.—		
R. bicolor, G. & B	XXI, 77	68
Cetomimidæ—		
Cetomimus, G. & B.—		
C. Gillii, G. & B	XXI, 78	69
Storeri, G. & B	XXI, 79	69
Myctophidæ—		
Myctophum, Raf.—		
M. punctatum, Raf	XXII, 80	71
affine, (Lütken), G. & B		72
opalinum, G. & B	XXII, 81	72, 511
phengodes, (Lütken), G. & B		72
Humboldti, (Risso)	XXII, 82	73
gracile, (Lütken), G. & B		74
Benoiti, (Cocco), G. & B	XXII, 83	74
Reinhardtii, (Lütken)		74
remiger, G. & B	XXII, 84	75
Hygomii, (Lütken), G. & B		75
Veranyi, (Moreau)		77
Heideri, (Stalling)		77
pterotus		511
californiense		511
arcticum		511
Townsendi		512
Benthosema, G. & B.—		
B. Mülleri, (Gmel.), G. & B	XXII, 85	76
arcticum, (Lütken), G. & B		78
Colletti, (Lütken), G. & B		78
Lampanyctus, Bon.—		
L. crocodilus, (Risso), G. & B	XXIII, 86	79
alatus, G. & B	XXIV, 92	79
Güntheri, G. & B	XXIV, 90	79
Warmingii, (Lütken), G. & B		80, 512
gemmifer, G. & B	XXIII, 88	80
Gemellarii, (Cocco), G. & B	XXIII, 87	80
cœruleus, (Klun.), G. & B		81
lacerta, G. & B	XXIV, 89	81
Ceratoscopelus, Gthr.—		
C. maderensis, (Lowe)	XXIV, 91	82
Notoscopelus, Gthr.—		
N. resplendens, (Richardson)	XXV, 94	83
quercinus, G. & B	XXVI, 97	83, 512
margaritiferus, G. & B	XXVI, 98	84
castaneus, G. & B	XXV, 95	84
caudispinosus, (Johnson)	XXV, 96	84
Lampadena, G. & B.—		
L. speculigera, G. & B	XXVI, 99	85
pyrsobola		512
Ætheprora, G. & B.—		
A. metopoclampa, (Cocco), G. & B	XXVII, 101	86
lucida, G. & B	XXVII, 102	87
effulgens, G. & B	XXVII, 103	87
Collettia, G. & B.—		
C. Rafinesquei, (Cocco), G. & B	XXVI, 100	88
nocturna, (Poey), J. & E		512
Diaphus, Eigenmann—		
D. theta, Eigenmann	XXIV, 93	89
engraulis, (Gthr.), Eigenmann		512
cœruleus, Klunzinger		512
Tarletonbeania, Eigenmann—		
T. tenua (Eigenmann)	XXVIII, 105	89
crenularе		512
Rhinoscopelus, Lütken—		
R. Coccoi, (Cocco), G. & B	XXVIII, 104	90
Andreæ, (Lütken), G. & B		90
rarus, (Lütken), G. & B		91, 512
antarcticus		512
Electrona, G. & B.—		
E. Rissoi, (Cocco), G. & B	XXVIII, 107	91
Dasyscopelus, Gthr.—		
D. asper, (Richardson)	XXVIII, 106	92
spinosus, (Steindachner)		92
subasper, (Gthr.)		92
Neoscopelus, Johns.—		
N. macrolepidotus, Johns	XXIX, 108, 109	93, 512

Names of genera and species.	Plate and figure.	Page.
MALACOPTERYGII—Continued.		
Myctophidæ—Continued.		
Scopelengys, Alc.—		
S. tristis, Alc		93, 512
Nannobrachium, Gthr.—		
N. MacDonaldi, G. & B.	XXIX, 110	91
Scopelosaurus nigrum, Gthr		91
leucopsarum		512
Maurolicidæ—		
Ichthyococcus, Bon. (= Coccia, Gthr.)—		
I. ovatus, (Coc.), Bon	XXX, 113	95
Opisthoproctus, V		95
O. soleatus		513
Maurolicus, Cocco—		
M. borealis, (Nils.), Gthr	XXX. 111	96
amethystinopunctatus, Cocco		96
Poweriæ, Cocco		96
Pennanti		96
australis, Hector		96
Vinciguerria, J. & E		513
V. attenuata, (Cocco), J. & E		513
Valenciennellus, J. & E		513
V. tripunctulatus		513
Chauliodontidæ—		
Chauliodus, Schn—		
C. Sloani, Schn	XXXI, 115	96
Macouni, Bean		513
Gonostomidæ—		
Gonostoma—		
G. denudatum, Raf	XXXI, 116	98
brevidens, K. & S	XXXI, 117	98
Cyclothone, G. & B.		
C. microdon, (Gthr.), G. & B. (= C. lusca, G. & B.)	XXX, 114	99, 514
bathyphila, (V.), G. & B	XXXI, 118	100
quadrioculatum, V. (?)		100
elongata (Gthr.), G. & B. (= Sigmops stigmaticus, Gill)	XXXII, 119	101
gracilis, Gthr		101
Bonapartia, G. & B.—		
B. pedaliota, G. & B	XXXII, 120	102
Yarrella, G. & B.—		
Y. Blackfordi, G. & B	XXXII, 121	103
Diplophos, Gthr.—		
D. tænia, Gthr	XXXIV, 126	101
pacificus, Gthr		104
Photichthys, Hutton—		
P. argenteus, Hutton	XXXII, 122	101
Mandneus, G. & B.—		
M. maderensis, (Johns.), G. & B		514
Astronesthidæ—		
Astronesthes, Rich.—		
A. niger, Rich	XXXIII, 123	105, 515
gemmifer, G. & B	XXXIII, 124	105
Richardsoni, Poey	XXXIII, 125	106
Stomiatidæ—		
Stomias, Cuv.—		
S. ferox, Rhdt	XXXIV, 127	107
boa, (Risso), Cuv	XXXIV, 128	108
affinis, Gthr	XXXIV, 129	108
nebulosus, Alc		108, 515
elongatus, Alc		108
Echiostoma, Lowe—		
E. barbatum, Lowe	XXXV, 130	109
margarita, G. & B	XXXV, 131	109
Opostomias, Gthr.—		
O. micripnus, Gthr	XXXV, 132	110
Grammatostomias, G. & B.—		
G. dentatus, G. & B	XXXV, 133	110
Pachystomias, Gthr.—		
P. microdon, Gthr	XXXVI, 134	111
Bathophilus, Gigl.—		
B. nigerrimus, Gigl	XXXVI, 136	111
Eustomias, V.—		
E. obscurus, V	XXXVI, 135	111
Photonectes, Gthr. (= Lucifer, Doderlein)—		
P. albipinnis, Döderlein		112
gracilis, G. & B	XXXVI, 137	112

Names of genera and species.	Plate and figure.	Page.
MALACOPTERYGII—Continued.		
Malacosteidæ—		
Malacosteus, Ayres—		
M. niger, Ayres	XXXVII, 138	114
choristodactylus, V	XXXVII, 139	114
indicus, Gthr		114
Photostomias, Collett—		
P. Guernei, Collett	XXXVII, 140	115
Thaumastomias, Alc.—		
T. atrox, Alc	XXXVII, 141	115
Alepisauridæ—		
Alepisaurus, Lowe—		
A. ferox, Lowe	XXXVIII, 142	117
æsculapius, Bean		117
Caulopus, Gill		117
altivelis, Poey		118
Poeyi, Gill		118
borealis, Gill		515
serra, Gill		515
Paralepididæ—		
Paralepis, Risso—		
P. coregonoides, Risso		119, 516
sphyrænoides, Risso		119, 516
intermedius, Poey		120, 516
hyalinus, Raf		515
Rissoi, Bk		
Cuvieri, Bon		118, 516
speciosus, Bellotti		118, 516
Arctozenus—		
A. borealis, (Rhdt.), J. & G	XXXVIII, 143	119, 516
coruscans		516
Sudis, Raf.—		
intermedius		120
S. hyalina, Raf	XXXVIII, 144	121
ringens		121
Odontostomidæ—		
Odontostomus, Cocco—		
O. hyalinus, Cocco	XXXVIII, 145	121
atratus, Alc		516
Omosudis, Gthr.—		
O. Loweii, Gthr	XL, 150	122
Sternoptychidæ—		
Sternoptyx, Herm.—		
S. diaphana, Lowe	XXXIX, 146	124
Argyropelecus, Cocco—		
A. hemigymnus, Cocco	XXXIX, 147	126
Alcocki, G. & B		126
Olfersii, (Cuv.), C. & V	XXXIX, 148	126
D'Urvillii, C. & V		127
aculeatus, Val		127
Sternoptychides, Ogilby—		
S. amabilis, Ogilby		128
Polyipnus, Gthr.—		
P. spinosus, Gthr	XXXIX, 149	128, 516
Idiacanthidæ—		
Idiacanthus, Peters (=Bathyophis, Gthr.)—		
I. fasciola, Gthr		128
antrostomus, Gilb		516
ferox, Gthr	XL, 151	129
LYOPOMI:		
Halosauridæ—		
Halosaurus—		
H. Oweni, Johns	XL, 152	130
Johnsonianus, V	XL, 153	131
Güntheri, G. & B		131
parvipinnis, Alc		516
Aldrovandia, G. & B.—		
A. rostrata, (Gthr.)	XLI, 154	132
affinis, (Gthr.)		516
macrochira, (Gthr.)	XLI, 155	133
Goodei, Gill		133
phalacrus, V	XLI, 156	134
mediorostris, Gthr		517
gracilis, G. & B	XLII, 157	134
pallida, G. & B	XLII, 158	135
Hoskynii, Alc		516
anguilliformis, Alc		516
Halosaurichthys, Alc.—		
H. carinicauda, Alc		136, 517

Names of genera and species.	Plate and figure.	Page.
APODES:		
Leptocephalidæ—		
Leptocephalus—		
L. vulgaris (L.)		517
Uroconger, Kaup—		
U. vicinus, V	XLII, 160	138, 517
Congermuræna, Kaup—		
C. guttulata, Gthr		138
longicauda, Alc		138, 517
flava, G. & B	XLII, 159	138
musteliceps		517
squaliceps, Alc		517
nasica, Alc		517
prorigera, Gilb		138
Coloconger, Alc.—		
C. raniceps, Alc		139, 517
Promyllantor, Alc.—		
P. purpureus, Alc		139, 517
Simenchelyidæ—		
Simenchelys, Gill—		
S. parasiticus, Gill	XLIII, 161	139
Ilyophidæ—		
Ilyophis, Gilb.—		
I. brunneus, Gilb	XLIII, 162	141
Synaphobranchidæ—		
Synaphobranchus, Johns.—		
S. pinnatus, (Gronov.), Gthr	XLIV, 164	143, 517
brevidorsalis, Gthr		144
affinis, Gthr		144
Histiobranchus, Gill—		
H. infernalis, Gill	XLIV, 165	145, 517
bathybius, Gthr		145
Murænesocidæ—		
Xenomystax, Gilb.—		
X. atrarius, Gilb		146
trucidens		517
Hoplunnis, Kaup—		
H. diomedianus, G. & B	XLIII, 163	146
Sanromuræsox, Alc.—		
S. vorax, Alc		146, 517
Ophichthyidæ, Gill—		
Pisoodonophis, Kaup—		
P. cruentifer, G. & B	XLIV, 166	147
Myrus, Kaup—		
M. pachyrhynchus, (V.)	XLV, 167	148
Nettastomidæ—		
Nettastoma, Raf.—		
N. melanurum, Raf		149, 517
brevirostris, Fac		149
parviceps, Gthr		148
tæniola, Wood-Mason		512
Venefica, J. & D.—		
V. procera, (G. & B.), J. & D	XLV, 168	149
proboscidea, (V.), J. & D		150
Chlopsis, Raf.—		
C. bicolor, Raf		150
equatorialis, Gilb		150
Nemichthyidæ, Gill—		
Nemichthys, Rich.—		
N. scolopaceus, Rich	XLVI, 170	152
avocetta		153
Labichthys, Gill and Ryder—		
L. carinatus, Gill and Ryder	XLVI, 171	153
elongatus, Gill and Ryder	XLVI, 172	153
Gillii, Bean		153
infans, (Gthr.), G. and B	XLVII, 173	153
Cyema, Gthr.—		
C. atrum, Gthr	XLVIII, 176	154
Spinivomer, Gill and Ryder—		
S. Goodei, Gill and Ryder		155
Serrivomer, Gill and Ryder—		
S. Beani, Gill and Ryder	XLVII, 175	155
Richardii, (V.), G. & B		155
Gavialiceps, Wood-Mason—		
G. mierops, Alc		156, 517
Investigator, G. & B.		
I. acanthonotus (Alc.)		518

Names of genera and species.	Plate and figure.	Page.
LYOMERI:		
Saccopharyngidæ—		
Saccopharynx, Mitchill—		
S. flagellum, Mitchill	XLVIII, 178–180	157
Eurypharyngidæ—		
Eurypharynx, V.—		
E. pelecanoides, V	XLVIII, 177	159, 518
Gastrostomus, Gill and Ryder—		
G. Bairdii, Gill and Ryder	XLIX, 181, 182	159
Dysomma, Alc.—		
D. bucephalus, Alc		160, 518
Dysommopsis, Alc.—		
D. muciparus, Alc		160
CARENCHELI:		
Derichthyidæ—		
Derichthys, Gill—		
D. serpentinus, Gill	XLV, 169	161
HETEROMI:		
Notacanthidæ—		
Notacanthus—		
N. nasus, Bloch	L, 183	164
analis, Gill	L, 184; LII, 191	165
Bonapartii, Risso	L, 185	166
sexspinis, Rich	LII, 192	167
phasganorus, Goode	L, 186	167
Gigliolia, G. & B.—		
G. Moseleyi, G. & B	LI, 187; LII, 193	169
Polyacanthonotus, Blk.—		
P. Rissoanus, (F. & V.), Gthr		170
Macdonaldia, G. & B.—		
M. rostrata, (Coll.), G. & B	LI, 189; LII, 195	171
Challengeri, (V.), G. & B		172
Lipogenyidæ—		
Lipogenys, G. & B.—		
L. Gillii, G. & B	LI, 190; LII, 196	173
TELEOCEPHALI:		
Berycidæ—		
Beryx, Cuv.—		
B. decadactylus, C. & V		175, 518
splendens, Lowe	LIII, 197	176, 518
lineatus, Gthr		175
affinis, Gthr		175
delphini, C. &. V		175
Melamphaes, Gthr.—		
M. typhlops, (Lowe), Gthr	LIII, 198	177
Plectromus, Gill—		
P. suborbitalis, Gill	LIV, 201	179
Beanii, (Gthr.)	LIV, 202	179
robustus, (Gthr.)		180
crassiceps, (Gthr.)	LIII, 200	180
megalops, (Lütken)		181
mizolepis, (Gthr.)		178
microps, (Gthr.)		518
cristiceps, (Gilb.)		518
lugubris, (Gilb.)		518
Scopelogadus, V.—		
S. cocles, V	LIII, 199	182
Malacosarcus, Gthr.—		
M. macrostoma, Gthr		182
Poromitra, G. & B.—		
P. capito, G. & B	LIII, 200	183
Anoplogaster, Gthr.—		
A. cornutus, (C. & V.), Gthr	LIV, 203	184
Caulolepis, Gill—		
C. longidens, Gill	LV, 204	185
Stephanoberycidæ—		
Stephanoberyx, Gill—		
S. Monæ, Gill	LV, 205	186
Gillii, G. & B	LVI, 206	187
Trachichthyidæ—		
Trachichthys, Shaw—		
T. Darwinii, Johns	LVI, 207	188
intermedius, Hector		518
australis, Shaw		518
Jacksoniensis, (Castelnau), Macleay		518
fernandezianus, Gthr		518
Traillii, Hutton		518
elongatus		

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Trachichthyicæ—Continued.		
Hoplostethus, C. & V.—		
H. mediterraneus, C. & V	LVI, 208	189, 519
atlanticus, Coll		189
japonicus, Hilg		519
Bathyclupeidæ—		
Bathyclupea, Alc.—		
B. Hoskynii, Alc		190
argentea, G. & B	CXXIII, 415	190
Anomalopidæ—		
Anomalops, Kner—		
A. palpebratus, (Bodd.), Gthr		191
Scombridæ—		
Thyrsites, C. & V.—		
T. atun, (Euphrasen), C. & V		194
Thyrsitops, Gill—		
T. lepidopoides, C. & V		194
violaceus, Bean = Escolar violaceus J. & E	LVII, 209	195, 519
Ruvettus, Cocco—		
R. pretiosus, Cocco	LVII, 210	196
Nesiarchus, Johns.—		
N. nasutus, Johns		197
Epinnula, Poey—		
E. magistralis, Poey	LVII, 211	198
Nealotus, Johns.—		
N. tripes, Johns		199
Promethichthys, Gill—		
P. prometheus (C. & V.) = P. atlanticus, Lowe		200
promethoides, Blecher		519
beryalensis		519
Dicrotus, Gthr.—		
D. armatus, Gthr		200
parvipinnis, G. & B	LVII, 212	201
Gempylus, C. & V.—		
G. serpens, C. & V		202
coluber, C. & V		202
Lepidopidæ—		
Lepidopus, Gouan—		
L. caudatus, (Euphrasen), White	LVIII, 213	203
Gouani, Bl		203
lusitanicus, Shaw		519
xantusi G. & B		519
Evoxymetopon, (Poey), Gill—		
E. tæniatus, Poey	LVIII, 214	204
Poeyi, Gthr		204
Benthodesmus, G. & B.—		
B. atlanticus, G. & B	LVIII, 215	205
elongatus, Clarke		206
Aphanopus, Lowe—		
A. carbo, Lowe	LIX, 216	207
minor, Collett		207
Trichiuridæ—		
Trichiurus, L.—		
T. lepturus, Linn	LIX, 217	208, 519
Coryphænidæ—		
Coryphæna, L.—		
C. hippurus		209
equisetis		209
Bramidæ—		
Brama, Schn.—		
B. Raii		210
chilensis		211
australis		211
squamosa		211
orcini		211
Dussumieri		211
Agassizii, Poey		211
Brevoorti, Poey		211
Saussurii, Lunel		211
longipinnis, Lowe		211
princeps, Johns		211
Raschi, Esmark		211
japonica, Hilg		211
Steinegeria, Jordan and Evermann—		
S. rubescens, Jordan and Evermann		519
Pteraycombus—		
P. brama		

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Diretmidæ—		
Diretmus, Johns.—		
D. argenteus, Johns., (=Gyrinomene nummularis, Vaillant)	LXV, 234	211, 519
aurens, Campbell		212
Pteraclidæ—		
Pteraclis, Gronov.—		
P. papilio, Lowe		212
ocellatus, C. & V		212
carolinus, C. & V		212
velifer, (Pallas)		212
Centrolophus, Lac.—		
C. pompilus, (Lac.), C. & V		213
britannicus, Gthr		213
Schedophilus, Cocco—		
S. medusophagus, Cocco	LXI, 223	214
maculatus		214
Botteri, Stdchnr		
Icosteus, Lockington—		
I. enigmaticus, Lockington	LXII, 224	216
Schedophilopsis, Stdchnr.—		
S. spinosus, Stdchnr	CXXIII, 416	216
Icichthys, J. & G.—		
I. Lockingtonii, J. & G	LXII, 226	215
Acrotidæ—		
Acrotus, Bean—		
A. Willoughbyi, Bean	LXII, 225	217
Grammicolepididæ—		
Grammicolepis, Poey—		
G. brachiusculus, Poey	LXI, 221	219
Nomeidæ—		
Nomeus, Cuv.—		
N. Gronovii, (Gmel.), Gthr	LXIII, 227	220, 520
Bathyseriola; Alc.—		
B. cyanea, Alc		220, 521
Psenes, C. & V.—		
P. pellucidus, Lütken	LXIII, 228	221
maculatus, Lütken	LXIII, 229	221
Luvaridæ—		
Luvarus, Raf.—		
L. imperialis, Raf	LXIV, 230	222, 521
Lamprididæ—		
Lampris, Retzius—		
L. regius, (Bonn.), Retzius		223
Zeidæ—		
Zenopsis, Gill—		
Z. ocellatus, (Storer), Gill		224
conchifer, Lowe		225
Cyttus, Gthr.—		
C. australis, (Rich.)		225
abbreviatus, Hector		225
hololepis, G. & B	LXV, 233	225
novæ-zelandiæ		
Cyttopsis, Gill—		
C. roseus, (Lowe), Gill		227
Orcosoma, C. & V.—		
O. atlanticum, C. & V		228
Caproidæ—		
Capros, Lac.—		
C. aper, (L.), Lac		229, 521
Capromimus—		
C. abbreviatus		
Antigonia, Lowe—		
A. capros, Lowe	LXV, 235	229
Tetragonuridæ—		
Tetragonurus, Risso—		
T. Cuvieri, Risso	CXXIII, 417	230
Chilodipteridæ—		
Melanostoma, Döderlein—		
M. japonicum, Döderlein		521
Glossamia, Gill—		
G. aprion, Gthr		231
pandionis, G. & B	LXIV, 231	231
Malacichthys, Döderlein—		
M. griseus, Gthr		232
Epigonus, Raf.—		
E. telescopus, (Risso), G. & B		232, 521
occidentalis, G. & B	LXVI, 236	233

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Chilodipteridæ—Continued.		
Pomatomichthys, Gigl.—		
P. Constanciæ, Gigl		234
Microichthys, Rüpp.—		
M. Coccoi, Rüpp		234
Brephostoma, Alc.—		
B. Carpenteri, Alc		234
Acropomidæ—		
Acropoma, T. & S.—		
A. philippinense, Gthr		235, 521
Scombropidæ—		
Scombrops, T. & S.—		
S. chilodipteroides, T. & S		235
oculatus, Poey		235
Hypoclydonia, G. & B.—		
H. bella, G. & B	LXVI, 237	236
Serranidæ—		
Centropristis, C. & V.—		
C. pleurospilus, (Gthr.)		237
investigatoris, (Alc.)		237, 521
annularis, Gthr		521
Prionodes æquidens, Gilb		521
Anthias, Schn.—		
A. megalops, Gthr		238
eos, Gilb		238, 521
aquilonaris, G. & B		238
Bathyanthias, Gthr.—		
B. roseus, Gthr		522
Synagrops, Gthr.—		
S. japonicus, (Döderlein), Gthr		522
Polyprion, Cuv.—		
P. americanum, (Schn.), Jordan	LXVI, 238	238, 522
Pristipomatidæ—		
Propoma, Gthr.—		
P. roseum, Gthr		522
Lutjanidæ—		
Aprion, C. & V.—		
A. macropthalmus, (Müller), J. & S	LXXXIX, 314	239
Verilus, Poey—		
V. sordidus Poey	LXIV, 232	240
Dentex, Cuv.—		
D. macrophthalmus, (Bloch), C. & V		240
Priacanthidæ—		
Priacanthus, C. & V.—		
P. catalufa, Poey		241, 522
Pseudopriacanthus, Blk.—		
P. altus, Gill	LXVI, 239, 240	242
Polymixiidæ—		
Polymixia, Lowe—		
P. nobilis, Lowe	LXVII, 241	243, 522
Pomacentridæ—		
Chromis, Cuv.—		
C. roseus, (Gthr.), G. & B		244
Scorpænidæ—		
Scorpæna, L.—		
S. scrofa obesa, Lowe		245, 522
cristulata, G. & B	LXVII, 242	246
ustulata, Lowe		246
Agassizii, G. & B	LXVII, 243	247
percoides, Solander		522
ocellata, Lowe		522
Bathysebastes, S. & D.—		
B. albescens, Gthr		248
Helicolenus, G. & B.—		
H. dactylopterus, (Del.), G. & B	LXVIII, 244	249, 523
maderensis, G. and B		250
Pontinus, Poey—		
P. castor, Poey		252
pollux, Poey		252
Kuhlii, (Bowdich), G. & B		253, 523
Bibroni, (Sauvage), G. & B		253
filifer, (Val.), G. & B		254
canariensis, (Sauvage), G. & B		255
Rathbuni, G. & B	LXVIII, 245	255
macrolepis, G. & B	LXIX, 247	257
longispinis, G. & B	LXVIII, 246	258
sierra, (Gilb.), G. & B		523
hoxanema, (Gthr.), G. & B		523

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Scorpænidæ—Continued.		
Sebastes, Cuv.—		
S. marinus, (L.), White	LXIX, 248	260
marinus viviparus, (Kröyer)		261
Sebastolobus, Gill—		
S. macrochir, (Gthr.), Gill		262, 523
alascanus, Bean		262
Sebastodes, Gill—		
S. paucispinis, (Ayres), J. & G		262
Sebastichthys, Gill—		
S. Goodei, Eigenmann		523
alutus, Gilb		523
rupestris, Gilb		523
zacentrus, Gilb		523
saxicola, Gilb		524
diploproa, Gilb		524
aurora, Gilb		524
introniger, Gilb		524
sinensis, Gilb		524
oculatus, (C. & V.)		523
Sctarches, Johns.—		
S. Güntheri, Johns		263
fidgiensis, Gthr		263
parmatus, Goode	LXX, 249	264
Lioscorpius, Gthr.—		
L. longiceps, Gthr		265
Minous		
M. inermis, Ale		524
Cottidæ—		
Cottus, L.—		
C. bathybii, Gthr		266, 524
Icelus, Kröyer—		
I. bicornis, (Rhdt.), J. & G		267
scutiger, Bean		524
euryops, Bean		524
Artediellus, Jordan—		
A. uncinatus, (Rhdt.), Jordan	LXXI, 255	267, 524
Icelinus, Jordan—		
I. quadriseriatus, Lockington		268
filamentosus, Gilb		524
tenuis, Gilb		525
fimbriatus, Gilb		525
oculatus, Gilb		525
Triglops, Rhdt.—		
T. Pingeli, Rhdt	LXXI, 256	269, 525
Prionistius—		
P. macellus, Bean		525
Cottunculus, Collett—		
C. microps, Collett	LXXII, 257, 261	269, 525
Thomsonii, Gthr. (=C. torvus, Goode)	LXXII, 258, 262	270, 525
Psychrolutes, Gthr.—		
P. zebra, Bean		525
paradoxus, Bean		525
Malacocottus, Bean—		
M. zonurus, Bean		272, 525
Cyclopteridæ (Cyclopterus)—		
Eumicrotremus, Gill—		
E. spinosus, (Müller), Gill	LXX, 250	272
Liparididæ—		
Liparis, L.—		
L. lineatus, (Lepechin), Kröyer		274
Careproctus, Kröyer—		
C. gelatinosus, (Pall.), Kr		275
spectrum, Bean		275
rannla, G. & B	LXX, 251	275
major, (Fab.), Garm		277
micropus, (Gthr.), Garm		277
Amitra, Goode—		
A. liparina, Goode	LXX, 252	278
Paraliparis, Coll.—		
P. bathybii, Coll		279
Copei, G. & B	LXXI, 253	279
rosaceus, Gilb		525
Hilgendorfia, G. & B.—		
H. membranacea, (Gthr.), G. & B		280
Gymnolycodes, V.—		
G. Edwardsi, V	254	281

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Agonidæ—		
Podothecus, Gill—		
P. decagonus, (Schn.), Jordan	LXXII, 259	282
Bathyagonus, Gilb.—		
B. nigripinnis, Gilb		283, 525
Xenochirus, Gilb.—		
X. triacanthus, Gilb		283, 525
pentacanthus, Gilb		283, 525
latifrons, Gilb		525
Aspidophoroides, Lac.—		
A. monopterygius, (Bloch)	LXXII, 260	283
Olriki		284
Latilidæ—		
Lopholatilus, G. & B.—		
L. chamæleonticeps, G. & B	LXXV, 265	284
Percophidæ—		
Aphritis, C. & V.—		
A. gobio, Gthr		289
Acanthaphritis, Gthr.—		
A. grandisquamis, Gthr		289
Nototheniidæ—		
Notothenia—		
N. mizops, Gthr		525
longipes, Stndchnr		525
Chænichthyidæ—		
Bathydraco, Gthr.—		
B. antareticus, Gthr		289
Hypsicometes, Goode—		
H. gobioides, Goode	LXXIV, 263	290, 526
Bathyhercis. Alc. (=Bembrops) platyrhynchus, Alc		526
Champsodon, Gthr.—		
C. vorax, Gthr		291, 526
Chiasmodontidæ—		
Chiasmodon, Johns.—		
C. niger, Johns	LXXIV, 264	292, 526
Ponerodon, Alc.—		
P. vastator, Alc		293
Pseudoscopelus, Lütken—		
P. scriptus, Lütken	LXXVI, 266	292, 526
Uranoscopidæ—		
Uranoscopus, L.—		
U. crassiceps, Alc		294
kaianus, Gthr		526
Batrachidæ—		
Porichthys, Girard—		
P. porosissimus, (C. & V.), Gthr	LXXVI, 267	294
Gobiidæ—		
Gobius, Cuv.—		
G. cometes, Alc		295, 526
Lesueurii, Risso		295
Jeffreysii, Gthr		
Callionymidæ—		
Callionymus, L.—		
C. lyra, L		296
kaianus, Gthr		296
calauropomus, Gthr		296
carlbarensis, Alc		296
phaeton, Gthr		296
himantophorus, G. & B	LXXVI, 268	296
maculatus, Raf		526
Stichæidæ—		
Carelophus, Nils.—		
C. Ascanii, (Walb.), Gthr		298
Anarrhichadidæ—		
Anarrhichas, L.—		
A. lupus, L	LXXVII, 269	299
minor, Olafsen	LXXVII, 270	301
latifrons, S. & H	LXXVII, 271	301
Ptilichthyidæ—		
Ptilichthys, Bean—		
P. Goodei, Bean	LXXXVII, 304	302
Zoarcidæ—		
Lycodes, Rhdt.—		
L. Vahlii, Rhdt		303
Esmarkii, Coll	LXXVIII, 272	303
reticulatus, Rhdt	LXXVIII, 273; LXXXI, 281	305
frigidus, Coll	LXXVIII, 274	305
mucosus, Rich	LXXVIII, 275; LXXXI, 283	306

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Zoarcidæ—Continued.		
Lycodes, Rhdt.—Continued.		
L. pallidus, Coll		306
perspicillum, Kr	LXXX, 278	307
Lütkenii		307
seminudus, Rhdt		307
Sarsii, Coll		307
zoarchus, G. & B	LXXIX, 276; LXXXI, 283	308
brevipes, Bean		526
macrops, Gthr		526
Lycenchelys, Gill—		
L. muræna, (Coll.), Gill		309
Verrillii, (G. & B.), Jordan	LXXIX, 277	309
paxillus, (G. & B.), Jordan	LXXX, 279, 282	311
porifer, Gilb		527
albus, (V.), G. & B		527
Lycodonus, G. & B.—		
L. mirabilis, G. & B	LXXX, 280	312
Aprodon, Gilb.—		
A. Corteziana		527
Lycodopsis, Coll.—		
L. pacificus, Coll		528
paxillus, Gilb		527
Bothrocara, Bean—		
B. mollis, Bean		528
Maynea—		
M. pusilla, Bean		526
brunnea, Bean		526
Gymnelis, Rhdt.—		
G. viridis, (Fab.), Rhdt		313
Lycodapus, Gilb.—		
L. fierasfer, Gilb		528
Melanostigma, Gthr.—		
M. gelatinosum, Gthr	LXXXII, 284	314
Brotulidæ—		
Bythites, Rhdt:—		
B. fuscus, Rhdt		316
Grammonus, Gill—		
G. ater, (Risso), G. & B		317, 528
Oligopus—		
O. ater		528
armatus, Döderlein		528
Catætyx, Gthr.—		
C. Messieri, Gthr		318
rubrirostris, Gilb		318, 528
Saccogaster, Alc.—		
S. maculatus, Alc		318, 528
Diplacanthopoma, Gthr.—		
D. brachysoma, Gthr		319, 528
Alcocki, G. & B		528
Dicromita, G. & B.—		
D. Agassizii, G. & B	LXXXII, 285	319
metriostoma, (V.), G. & B		320
microphthalma, (V.), G. & B		320
oncocephala, (V.), G. & B		321
Bassozetus, Gill—		
B. normalis, Gill	LXXXII, 287	322
compressus, (Gthr.), G. & B		322
tænia, (Gthr.), G. & B		323, 529
catena, G. & B	LXXXII, 286	323
glutinosus, Alc		322, 528
Glyptophidium, Alc.—		
G. argenteum, Alc		324, 529
macropus Alc		529
Dermatorus, Alc.—		
D. trichiurus, Alc		325, 529
melanocephalus, Alc		325
Neobythites, G. & B. (=Lycnocraspedum Alc.)—		
N. Gillii, G. & B	LXXXIII, 289	325
marginatus, G. & B	LXXXIII, 290	326
macrops, Gthr		326, 529
crassus, (V.), G. & B		327
steatiticus, Alc		529
squamipinnis		529
Benthocometes, G. & B.—		
B. robustus, G. & B	LXXXII, 288	327
muræniolepis, (V.), G. & B		328

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Brotulidæ—Continued.		
Bassogigas, Gill—		
B. Gillii, G. & B.	LXXXIII, 291	328, 529
grandis, (Gthr.), G. & B.		329, 529
pterotus, (Alc.), G. & B.		328, 529
stelliferoides, (Gilb.), G. & B.		328, 529
Alcockia, G. & B.—		
A. rostratus, (Gthr.), G. & B.		329
Celema, G. & B.—		
C. nuda, (V.), G. & B.		330
subarmata, (V.), G. & B.		330
Mœbia, G. & B.—		
M. gracilis, (Gthr.), G. & B.		331
Barathrodemus, G. & B.—		
B. manatinus, G. & B.	LXXXIV, 294	332
Pycnocraspedum, Alc.—		
P. squamipinne, Alc.		333, 529
Nematonus, Gthr.—		
N. pectoralis, (G. & B.), Gthr.	LXXXIV, 295	333
Porogadus, G. & B.—		
P. miles, G. & B.	LXXXIII, 292	334
Penopus, G. & B.—		
P. MacDonaldi, G. & B.	LXXXIV, 293	336
Acanthonus, Gthr.—		
A. armatus, Gthr.		336
Tauredophidium, Alc.—		
T. Hextii, Alc.	LXXXIV, 296	336
Pteroidonus, Gthr.—		
P. quinquarius, Gthr.		337
Dicrolene, G. & B. (=Paradicrolene, Alc.)—		
D. intronigra, G. & B.	LXXXV, 297	338
multifilis, Alc.		337, 529
nigricaudis, Alc.		338, 529
Vaillantii, Alc.		338, 529
Mixonus, Gthr.—		
M. laticeps, Gthr.	LXXXIV, 296	339
Sirembo, Blk.—		
S. inermis, (Schl.), Blk.		340
Monomitopus, Alc.—		
M. nigripinnis, Alc.		340, 529
Typhlonus, Gthr.—		
T. nasus, Gthr.		340
Barathronus, G. & B.—		
B. bicolor, G. & B.	LXXXV, 298	341
Aphyonus, Gthr.—		
A. gelatinosus, Gthr.		342
mollis, G. & B.	LXXXV, 299	342
Rhodichthys, Coll.—		
R. regina, Coll.	LXXXVI, 303	342
Alexeterion, V.—		
A. Parfaiti, V.	LXXXVI, 300	343
Bellottia, Gigl.—		
B. apoda, Gigl.		344
Hephthocara, Alc.—		
H. simum, Alc.		344
Lamprogrammus, Alc.—		
L. niger, Alc.	LXXXVI, 302	344, 530
fragilis, Alc.		530
Ophidiidæ—		
Ophidium—		
O. murænolepis, Gthr.		530
Otophidium, Gill—		
O. omostigma, (J. & G.), Jordan	LXXXVII, 305	345
Leptophidium, Gill—		
L. cervinum, G. & B.	LXXXVII, 306	346
profundorum, Gill	LXXXVII, 307	347
marmoratum, G. & B.	LXXXVII, 308	348
pardale, Gilb.		530
microlepis, Gilb.		530
stigmatistium, Gilb.		530
ommelas, Gilb.		530
Ateleopodidæ—		
Ateleopus, Schl.—		
A. japonicus, Schl.		349
indicus, Alc.		349, 530

Names of genera and species.	Plate and figure.	Page.
TELEOCEPHALI—Continued.		
Lophotidæ—		
Lophotes, Giorna—		
L. Cepedianus, Giorna	CXV, 389	349
cristatus, Johns		350
Capellei, T. & S	CXV, 390	351
ANACANTHINI:		
Gadidæ—		
Gadus, Art.—		
G. morrhua, L		354
Melanogrammus, Gill—		
M. æglefinus, (L.), Gill		354, 530
Brachygadus—		
B. minutus, (L.), Gill		
Gadiculus, Guich.—		
G. argenteus, Guich		355, 530
Micromesistius, Gill—		
M. poutassou, (Risso), Gill		355, 530
Merlangus—		
M. vulgaris		530
Phycis, Schn.—		
P. mediterraneus, Delaroche		356
Earlii, G. & B		356
blennioides, (Br.), Schn		357, 530
regius, (Walb.), J. & B	LXXXVIII, 309	357
cirratus, G. & B	LXXXVIII, 310	358
chuss, (Walb.) Gill	LXXXVIII, 311	359
tenuis, (Mitch.), DeKay	LXXXIX, 312	359
Chesteri, G. & B	LXXXIX, 313	360
Læmonema, Gthr.—		
L. Yarrellii, (Lowe), Gthr		362
robustum, Gthr		362
barbatula, G. & B	XC, 315	362
melanurum, G. & B	XC, 316	363
Molva, Nils.—		
M. vulgaris, Flem	XC, 317	364
byrkelange, Walb		365
elongata, (Otto), Gthr		365
Physiculus, Kaup—		
P. Dalwigkii, Kaup		366, 531
Kaupi, Poey	XCI, 318	366
peregrinus, Gthr		366
fulvus, Bean	XCI, 319	366
rastrelliger, Gilb		530
nematopus, Gilb		530
rosens, Alc		530
argyropastus, Alc		530
Uraleptus, Costa—		
U. Maraldi, (Risso), Costa	XCI, 320	367
near Maraldi		368
Lotella, Kaup—		
L. maxillaris, Bean	XCII, 321	368
Mora, Risso—		
M. mediterranea, Risso	XCII, 322	369, 531
Lepidion, Sw.—		
L Rissoi, Sw	XCII, 323	370, 531
Güntheri, (Gigl.), G. & B		370
eques, (Gthr.), G. & B		371
ensiferus, (Gthr.), G. & B		371, 531
inosimæ, Gthr		531
Salilota—		
S. australis, Gthr		531
Antimora, Gthr.—		
A. viola, (G. & B.), Jordan	XCIII, 324	372
rostrata, Gthr		375
microlepis, Bean		531
Halargyreus, Gthr.—		
H. brevipes, V	XCIII, 325	375
Johnsonii, Gthr		376, 531
near Johnsonii		376
Eretmophorus, Gigl.—		
E. Kleinenbergi, Gigl		377
Hypsirhynchus, Fac.—		
H. hepaticus, Fac		380
Strinsia, Raf.—		
S. tinca, Raf	XCIII, 326	380
Melanonus, Gthr.—		
M. gracilis, Gthr		380

Names of genera and species.	Plate and figure.	Page.
ANACANTHINI—Continued.		
Gadidæ—Continued.		
Onos, Risso—		
O. ensis, (Rhdt.), Gill	XCIV, 327	381
macrophthalmus, Gthr		382
biscayensis, Coll		382
Reinhardtii, (Kr.), Coll		383, 531
tricirratus, (Bloch), G. & B		383
Rhinonemus, Gill—		
R. cimbrius, (L.), G. & B	XCIV, 328	384, 531
Brosmius, Cuv.—		
B. brosme, (Müll.), Gthr	XCIV, 329	385
Brosmiculus, V.—		
B. imberbis, V		385
Merluciidæ—		
Merlucius, Raf.—		
M. bilinearis, (Mitch.), Gill	XCV, 330	386
smiridus, (Raf.), G. & B		388
Bregmacerotidæ—		
Bregmaceros, Thompson—		
B. atlanticus, G. & B	XCV, 331	388
MacClellandii, Thompson		389, 531
Macruridæ—		
Macrurus, Bloch—		
M. berglax, Lac	XCVI, 334	391
sclerorhynchus, Val		391
smiliophorus, Vaill		392
æqualis, (Gthr.), G. & B		392
serratus, Lowe		392
Bairdii, G. & B	XCVI, 335	393
holotrachys, Gthr		396
zaniaphorus, V. (near holotrachys, V.)		397
rudis, Gthr		390
asper, Gthr		390
stelgidolepis, Gilb		391
carinatus, Gthr		391
investigatoris, Alc		390, 531, 532
semiquinquenciatus, Alc		390, 531, 532
Hoskynii, Alc		390, 531, 532
Hextii, Alc		390, 531, 532
Wood-Masoni, Alc		390, 531, 532
Petersonii, Alc		390, 531, 532
brevirostris, Alc		390, 531, 532
macrolophus, Alc		390, 531, 532
lophotes, Alc		390, 531, 532
polylepis, Alc		390, 532
nasutus, Gthr		390
serrulatus, Gthr		390
hispidus, Alc		531
pumiliceps, Alc		532
Cœlorhynchus, Giorna—		
C. atlanticus, (Lowe), G. & B		397, 533
carminatus, (Goode), G. & B	XCVI, 336	398
occa, G. & B	XCV, 332, 333, 337	400
japonicus, (V.), (near occa)		400
japonicus, Schl		400, 533
caribbæus, G. & B	XCVII, 338	401
fasciatus, (Gthr.), G. & B		402
parallelus, Gthr		532
australis, Gthr		532, 533
quadricristatus, Alc		532, 533
flavellispinis, Alc		533
Coryphænoides, Gunner—		
C. rupestris, Gunner		402
sulcatus, G. & B		403, 533
carapinus, G. & B	XCVII, 339	404
altipinnis, Gthr		402
serratus, Lowe		525
Hymenocephalus, Gigl.—		
H. italicus, Gigl		406
Goodei, (Gthr.), Bean	XCVII, 340	407
cavernosus, G. & B	XCVII, 341	408
heterolepis, Alc		533
Lionurus, Gthr.—		
L. filicauda, Gthr	XCVIII, 342	409
Trachonurus, Gthr.—		
G. sulcatus, G. & B	XCVIII, 343	410
villosus, Gthr		409

Names of genera and species.	Plate and figure.	Page.
ANACANTHINI—Continued.		
Macruridæ—Continued.		
Cetonurus, Gthr.—		
C. globiceps, V	XCVIII, 344	411
crassiceps, Gthr		411
Chalinura, G. & B.—		
C. simula, G. & B	XCVIII, 345	412
brevibarbis, G. & B		413
occidentalis, G. & B		413
leptolepis, Gthr		414
fernandezianus, Gthr		412
liocephala, Gthr		412
Murrayi, Gthr		412
serrula, Bean		412
hispida, Alc		412
mediterranea, Gigl	XCIX, 345	533
Optonurus, Gthr.—		
O. denticulatus, Gthr		414
Malacocephalus, Gthr.—		
M. lævis, (Lowe), Gthr		415
occidentalis, G. & B		415
sublævis, (V.)		535
Nematonurus, Gthr.—		
N. armatus, (Hector)		416
gigas, (V.), G. & B		416
affinis, (Gthr.)		416
Moseleya, G. & B.—		
M. longifilis, (Gthr.), G. & B	XCIX, 347	417
Abyssicola, G. & B.—		
A. macrochir, (Gthr.), G. & B	C, 348	417
Trachyrhynchus, Giorna—		
T. scabrus, (Raf.), G. & B	C, 349	417, 534
Murrayi, Gthr		418
longirostris, Gthr		417, 534
Macruronus, Gthr.—		
M. novæ-zelandiæ, (Hector), Gthr	CI, 350	418, 534
Steindachneria, G. & B.—		
S. argentea, G. & B	CI, 351	419
Bathygadus, Gthr.—		
B. favosus, G. & B	CI, 352	420
arcuatus, G. & B		421
longifilis, G. & B		422
near longifilis, Alc		423
dispar, (V.), G. & B		423
macrops, G. & B		423
melanobranchus, V		424
cottoides, Gthr		420
multifilis, Gthr		420
furvescens, Alc		535
Lyconidæ—		
Lyconus, Gthr.—		
L. pinnatus, Gthr		425
HETEROSOMATA:		
Pleuronectidæ—		
Lepidopsetta—		
L. maculata, Gthr		535
Chascanopsetta, Alc.—		
C. lugubris, Alc		535
Pœcilopsetta, Gthr.—		
P. maculosa, Alc		535
Limanda, Gottsche—		
L. vulgaris, Gottsche		427
microstoma, Gthr		427
ferruginea, (Storer), G. & B		427
Beanii, Goode	CII, 355	428
Glyptocephalus, Gottsche—		
G. cynoglossus, (L.), Gill	CII, 356	430
Hippoglossus, Cuv.—		
H. vulgaris, Flem	CV, 363	434
Platysomatichthys, Blkr.—		
P. hippoglossoides, (Walb.), G. & B	CV, 364	435
Paralichthys, Girard—		
P. oblongus, (Mitch.), J		436
Hectoris, Gthr		436
boops, Hector		436
ocellatus, Gthr		436
Notosema, G. & B.—		
N. dilecta, G. & B	CIV, 362; CVI, 365	437

Names of genera and species.	Plate and figure.	Page.
HETEROSOMATA—Continued.		
Pleuronectidæ—Continued.		
Hippoglossoides, Gottsche—		
H. platessoides, (Fab.), Gill	CVII, 367	438
Lepidorhombus, Gthr.—		
L. megastoma, (Don.), Gthr		439
Boscii, (Risso)		439, 535
Scianectes, Alc.—		
S. lophoptera, Alc		440
macrophthalma, Alc	CVIII, 371	440
Trichopsetta, Gill—		
T. ventralis, (G. & B.), Gill	CIX, 372	440
Arnoglossus—		
A. Grohmanni, Bon		536
Platophrys, Sw.—		
P. nebularis, J. & G		441
cornutus, Gthr		442
Citharichthys, Blkr.—		
C. arctifrons, Goode	CVI, 366	442
unicornis, Goode	CVIII, 369	444
microstomus, Gill		446
spilopterus, Gthr	CVIII, 370	447
dinoceros, G. & B		447
pætulus, (G. & B.), J. & G	CIX, 373	448
Etropus, J. & G.—		
E. rimosus, G. & B	CIV, 360, 361	450
Cyclopsetta, Gill—		
C. fimbriata, G. & B	CVII, 368	451
Monolene, Goode—		
M. sessilicauda, Goode	CIII, 357	452
atrimana, G. & B	CIII, 358	455
Soleidæ—		
Solea, Cuv.—		
S. vulgaris, Quensel		457
Greeni, Gthr		536
umbralites, Alc		536
Microchirus, Bon.—		
M. variegatus, (Don.), M		457
profundicolus, (V.), G. & B		457
Aphoristia, Kaup—		
A. nebulosa, G. & B	CX, 375	458
septemstriata, Alc		536
marginata, G. & B	CX, 376	459
pigra, G. & B	CX, 377	460
diomedeana, G. & B	CX, 378	460
pusilla, G. & B	CX, 379	461
trifasciata		537
Ammopleurops, Gthr.—		
A. lacteus (Bon.), Gthr		462
Arelia, Kaup—		
A. Carpenteri, (Alc.)		462
CRANIOMI:		
Triglidæ, Risso—		
Trigla, Art.—		
T. cuculus, L		463
gurnardus, L		537
lyra, L		463
leptacantha, Gthr		463
spiloptera, Gthr		463
hemisticta, Schl		463
milvus, Bp		463
corax, Bp		463
cavillone		537
Lepidotrigla, Gthr.—		
L. cavillone, (Lac.)		463
Prionotus, Lac.—		
P. militaris, G. & B	CXI, 380; CXII, 384	364
egretta, G. & B	CXI, 381	465
Stearnsii, J. & S		466
alatus, G. & B	CXI, 382	467
palmipes, (Mitch.), Storer		468
Beanii, Goode (wrongly named in plate *P. tribulis*)	CXII, 383	468
Peristediidæ—		
Peristedion, Lac.—		
P. miniatum, Goode	CXIII, 385	470
longispatha, G. & B	CXIV, 386	472
imberbe, Poey		472

Names of genera and species.	Plate and figure.	Page.
CRANIOMI—Continued.		
Peristediidæ—Continued.		
Peristedion, Lac.—Continued.		
P. gracile, G. & B	CXIV, 387	473
platycephalum, G. & B	CXIV, 388	474
truncatum, Gthr		475
moluccense, Blkr		470
Murrayi, Gthr		470, 537
liorhynchum, Gthr		470
cataphractum, (L.)		537
Rivers-Andersoni, Alc		537
TAENIOSOMI:		
Trachypteridæ—		
Trachypterus, Gouan—		
T. iris, (Walb.), C. & V	CXV, 391	477
gryphurus, Lowe		478
arcticus, (Br.), Nils	CXVI, 392	479
Rüppellii, Gthr		479
liopterus, C. & V		479
cristatus, Bonelli		479
repandus, (Met.), Costa		480
Spinolæ, C. & V		480
altivelis, Kner		480
altivelis, Huttou		480
arawata, Clarke		480
Regalecidæ—		
Regalecus, Brun.—		
R. glesne, Asc	CXVII, 395	480
pacificus, Haase		480
argenteus, Huttou		480
Stylephoridæ—		
Stylephorus, Shaw—		
S. chordatus, Shaw	CXVI, 393, 394	482
HEMIBRANCHII:		
Macrorhamphosidæ—		
Macrorhamphosus, Lac.—		
M. scolopax, (L.)	CXVII, 396	483
Aulostomidæ—		
Aulostoma, Lac.—		
A. coloratum, M. & T		484
chinense, L		484
longipes, V	CXVII, 397	484
PEDICULATI:		
Lophiidæ—		
Lophius, Art.—		
L. piscatorius, L	CXVIII, 400	485
budegassa, Sp		485
Naresii, Gthr		485
Lophiomus, Gill—		
L. setigerus, (Wahl), Gill		485
Lophiodes, G. & B.—		
L. mutilus, (Alc.)		537
lugubris, (Alc.)		537
Antennariidæ—		
Pterophryne, Gill—		
P. histrio, (L.), Gill		486
Antennarius, Cuv.—		
A. pleurophthalmus, Gill		487
Chaunax, Lowe—		
C. pictus, Lowe	CXVII, 398	487
Ceratiidæ—		
Ceratias, Kr.—		
C. Holbölli, Kr	CXVII, 399	489
Diceratias, Gthr.—		
D. bispinosus, Gthr		489
Mancalias, Gill—		
M. uranoscopus, (Murray), Gill		490
Shufeldtii, Gill	CXIX, 401	490
Cryptopsaras, Gill—		
C. Couesii, Gill	CXIX, 402	491
caruuculatus, Gthr		491
Oneirodes, Lütken—		
O. Eschrichtii, Lütken		492
Paroneirodes, Alc.—		
P. glomerosus, Alc	CXIX, 404	493
Himantolophus, Rhdt —		
H. grœnlandicus, Rhdt. (fig. misnamed *C. Reinhardtii*)	CXX, 405	493

Names of genera and species.	Plate and figure.	Page.
PEDICULATI—Continued.		
Ceratiidæ—Continued.		
Corynolophus, Gill—		
C. Reinhardtii, (Lütken), Gill		491
Ægeonichthys, Clarke—		
A. Appelii, Clarke		494
Melanocetus, Gthr.—		
M. Johnsonii, Gthr	CXX, 406	494
Liocetus, Gthr.—		
L. Murrayi, Gthr	CXX, 407	495
Linophryne, Collett—		
L. lucifer, Collett	CXXI, 408	496
Caulophryne, G. & B.—		
C. Jordani, G. & B. (plate as *C. setosus*)	CXXI, 409	496
Onchocephalidæ—		
Onchocephalus, (Fisch.), Gill—		
O. radiatus, (Mitch.), G. & B		498
vespertilio, (L.), G. & B		499, 537
Malthopsis, Alc.—		
M. luteus, Alc		537
Halieutæa, C. & V.—		
H. stellata, C. & V	CXIX, 403	499
coccinea, Alc	CXXI, 410	499
nigra, Alc		537
spongiosa, Gilb		537
fumosa, Alc		537
Halieutella, G. & B.—		
H. lappa, G. & B	CXXII, 412	500
Dibranchus, Peters—		
D. atlanticus, Peters	CXXII, 413	501
nasutus, Alc		537
micropus, Alc		537
Halicmetus, Alc.—		
H. ruber, Alc		503
Halieutichthys, Poey—		
H. aculeatus, (Mitch.), Goode	CXXII, 414	504
APPENDIX:		
Additions and corrections		507
ALPHABETICAL INDEX		539

OCEANIC ICHTHYOLOGY.

LIST OF PLATES AND FIGURES.

NOTE.—The actual size of the specimens from which the figures are drawn may, in most instances, be determined by the use of the inch mark beneath the engraving, which in the photographic reduction of the drawing is reduced in the same proportion as the drawing itself. Where this is not present, the scale of reduction is approximately indicated in this list of plates, except in the case of outlines copied from published figures and of large species of very variable length, such as the sharks and rays. Where no reference to length appears either upon the plate or in the list of figures, it may be assumed that the figure is of natural size, or nearly so.

PLATE I.

Text page.

1. **Myxine glutinosa**, Linnæus 2
   Drawing by H. L. Todd, from No. 23466, U. S. N. M. (Gloucester Donation No. 287), N. lat. 43° 33′, W. lon. 52° 10′, 300 fathoms.
2. **Myxine australis**, Jenyns 3
   Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at Station 2770, in S. lat. 18° 37′ 00″, W. lon. 65° 16′ 00″, at a depth of 58 fathoms.
3. **Petromyzon marinus**, Linnæus 4
   Drawing by H. L. Todd, from No. 10651, U. S. N. M., collected at Wood's Holl, Mass., by Vinal N. Edwards.

PLATE II.

4. **Scymnorhinus lichia**, (Bennaterre), Bonaparte 7
   Drawing from Bonaparte, Fauna Italica, Pl. 112.
5. **Etmopterus pusillus**, (Lowe), Günther 10
   Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at Station CVIII, off St. Kitt's, West Indies, in 208 fathoms. (About three-fourths natural size.)
6. **Scylliorhinus retifer**, (Garman), Jordan 10
   Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at Station CVII, off Barbados. (Slightly reduced.)
7. **Centroscyllium Fabricii**, (Reinhardt), Müller and Henle 11
   Drawing by A. H. Baldwin, from No. 22879, U. S. N. M., collected by George W. Scott, in N. lat. 41° 23′, W. lon. 53° 25′, at a depth of 200 fathoms.

PLATE III.

8. **Somniosus microcephalus**, (Schneider), Goode and Bean 7
   Outline from Day, Fishes of Great Britain and Ireland, Pl. CLXII, Fig. 1.
9. **Echinorhinus spinosus**, (Gmelin), Blainville 8
   Outline from Day, Fishes of Great Britain and Ireland, Vol. II, Pl. CLXII, Fig. 2.
10. **Pristiurus melastomus**, (Rafinesque), Bonaparte 20
    Drawing from Annales du Musée d'Hist. Nat. Paris, Vol. XVIII, Pl. VI.
11. **Centrophorus granulosus**, Müller and Henle 12
    Outline from Müller and Henle, Elasmobranchs, Pl. 33.

PLATE IV.

Text page.

12. **Scymnodon ringens**, Bocage and Capello 11
Drawing from Bocage and Capello, Peix. Plagiost., Vol. I, Pl. I, Fig. 1.

13. **Centroscymnus cœlolepis**, Bocage and Capello 14
Drawing by H. L. Todd, from No. 26219, U. S. N. M., collected by the steamer *Fish Hawk* at Station 893, off Marthas Vineyard, N. lat. 39° 52′ 20″, W. lon. 70° 58′ 00″, in 372 fathoms. (About two-thirds natural size.)

14, 15. **Scylliorhinus retifer**, (Garman), Jordan 16
Drawings by H. L. Todd, from No. 26745, U. S. N. M., collected by the steamer *Fish Hawk* at Station 896, in N. lat. 37° 26′, W. lon. 71° 19′, at a depth of 56 fathoms.

PLATE V.

16. **Scylliorhinus profundorum**, Goode and Bean 17
Drawing by M. M. Smith, from No. 35646, U. S. N. M., collected by the steamer *Albatross* at Station 2234, in N. lat. 39° 09′, W. lon. 72° 03′ 15″, at a depth of 810 fathoms.

17. **Spinax niger**, Bonaparte 10
Drawing from Bonaparte, Fauna Italica.

18. **Pseudotriacis microdon**, Capello 18
Drawing by H. L. Todd, from No. 32516, U. S. N. M., from Amagansett, N. Y., collected by J. B. Edwards, keeper of Suffolk Life-Saving Station. (About one-seventeenth natural size.)

19. **Cetorhinus maximus**, Gunner 21
Drawing from Annales du Musée d'Hist. Nat. Paris, Vol. XVIII, Pl. VI; reëngraved from Fish. Ind., Pl. 249, upper figure.

PLATE VI.

20. **Pristiurus atlanticus**, Vaillant 24
Outline from Vaillant, Explorations Scientifiques du Travailleur et Talisman, Pl. I, Fig. 1.

21. **Oxynotus centrina**, (Linnæus), Rafinesque 15
Drawing from Bonaparte, Fauna Italica, Pl. 141.

22. **Chlamydoselachus anguineus**, Garman 22
Outline from Day, Fishes of Great Britain and Ireland, Pl. CLXXIV.

PLATE VII.

23. **Raia Ackleyi**, Garman 25
Drawing by J. C. Van Hook, from No. 43726, U. S. N. M., collected by the steamer *Blake* on Yucatan Banks, Gulf of Mexico.

24. **Raia Ackleyi ornata**, Garman 26
Drawing by J. C. Van Hook, from No. 43727, U. S. N. M., from the Museum of Comparative Zoölogy, collected at a depth of 138–142 fathoms. (Slightly enlarged.)

PLATE VIII.

25. **Raia circularis**, Couch 27
Outline from Day, Fishes of Great Britain and Ireland, Pl. CLXXIV.

26. **Raia plutonia**, Garman 27
Outline by J. C. Van Hook, from a specimen collected by the steamer *Blake*, in about N. lat. 32°, W. lon. 78°, at a depth of 229–334 fathoms.

PLATE IX.

27. **Raia radiata**, Donovan 25
Drawing by H. L. Todd, from No. 23514, U. S. N. M., collected by the U. S. Fish Commission off Provincetown, Mass. (About four-sevenths natural size.)

28. **Raia hyperborea**, Collett 28
Outline from Collett, Fishes Norwegian North Atlantic Expedition, Pl. IX.

29. **Raia lævis**, Mitchill 28
Drawing by H. L. Todd, from No. 21577, U. S. N. M., collected by the steamer *Fish Hawk* at Station 771, in Narragansett Bay, at a depth of 8¼ fathoms.

30. **Raia granulata**, Gill 29
Drawing by H. L. Todd, from the type specimen, collected by Capt. Joseph W. Collins, of the Gloucester fishing fleet, on Le Have Bank. (About one-fourteenth natural size.)

PLATE X.

Text page.

31. **Chimæra monstrosa**, Linnæus 31
Outline from Bonaparte, Fauna Italica, Pl. 130.

32. **Chimæra affinis**, Capello 31
Drawing by H. L. Todd, from a specimen collected on the southeastern portion of Le Have Bank, in N. lat. 42° 40′, W. lon. 63° 23′. (About one-seventh natural size.)

33–35. **Chimæra affinis**, Capello 31
Drawings by S. F. Denton, from a specimen collected by the schooner *Centennial*, Capt. D. C. Murphy, off Banquereux, in N. lat. 43° 46′, W. lon. 59° 19′. (Natural size.)

36. **Callorhynchus antarcticus**, (Linnæus) 32
Outline from Zoölogy of Beechey's Voyage, Pl. XXIII.

PLATE XI.

37, 38. **Harriotta Raleighana**, Goode and Bean 33
Drawings by M. M. Smith, from No. 35631, U. S. N. M., collected by the steamer *Albatross* at Station 2235, in N. lat. 39° 12′ 00″, W. lon. 72° 03′ 30″, at a depth of 707 fathoms.

39, 40. **Harriotta Raleighana**, Goode and Bean 33
Drawings by S. F. Denton, from No. 35520, U. S. N. M., collected by the steamer *Albatross*, at Station 2210, in N. lat. 39° 37′ 45″, W. lon. 71° 18′ 45″, at a depth of 991 fathoms. (About one and three-fourths natural size.)

PLATE XII.

41. **Alepocephalus rostratus**, Risso 36
Outline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Pl. 566.

42. **Alepocephalus niger**, Günther 38
Outline from Günther, Challenger Report, Vol. XXII, Pl. LVI.

43. **Conocara macroptera**, (Vaillant), Goode and Bean 39
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XI, Fig. 2.

44. **Bathytroctes macrolepis**, Günther 41
Outline from Günther, Challenger Report, Vol. XXII, Pl. LVII, Fig. A.

PLATE XIII.

45. **Alepocephalus Agassizii**, Goode and Bean 37
Drawing by H. L. Todd, from No. 33056, U. S. N. M., collected by the steamer *Albatross* at Station 2030, in N. lat. 39° 29′ 45″, W. lon. 71° 43′, at a depth of 588 fathoms.

46. **Alepocephalus productus**, Gill 37
Drawing by H. L. Todd, from type No. 33341, U. S. N. M., collected by the steamer *Albatross* at Station 2035, in N. lat. 39° 26′ 16″, W. lon. 70° 02′ 37″, at a depth of 1,362 fathoms.

47. **Alepocephalus Bairdii**, Goode and Bean 38
Drawing by H. L. Todd, from type No. 22468, U. S. N. M. (Gloucester Donation No. 305), collected by Christian Johnson, of the schooner *William Thompson*, on the Grand Banks, in 200 fathoms. (About one-fourth natural size.)

48. **Conocara McDonaldi**, Goode and Bean 39
Drawing by S. F. Denton, from a specimen collected by the steamer *Blake* at Station CLXXII, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms.

PLATE XIV.

49. **Bathytroctes antillarum**, Goode and Bean 41
Drawing by M. M. Smith, from type No. 43739, U. S. N. M., collected by the steamer *Albatross* at Station 2391, in N. lat. 28° 38′ 30″, W. lon. 87° 02′, at a depth of 420 fathoms.

50. **Bathytroctes æquatoris**, Goode and Bean 44
Drawing by A. H. Baldwin, from a specimen obtained by the steamer *Albatross* at Station 2793, in N. lat. 01° 03′, W. lon. 80° 15′, at a depth of 741 fathoms.

51. **Aleposomus Copei**, Gill 47
Drawing by H. L. Todd, from type No. 33551, U. S. N. M., collected by the steamer *Albatross* at Station 2099, in N. lat. 37° 12′ 20″, W. lon. 69° 39′, at a depth of 2,949 fathoms.

Text page.

52. **Pterothrissus gissu**, Hilgendorf 51
Outline from Günther, Challenger Report, Vol. XXII, Pl. LVI, Fig. A. (About one-half natural size.)

PLATE XV.

53. **Platytroctes apus**, Günther 46
Outline from Günther, Challenger Report, Vol. XXII, Pl. LVIII, Fig. A.

54. **Anomalopterus pinguis**, Vaillant 49
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XI, Fig. 4.

55. **Aulastomatomorpha phosphorops**, Alcock 50
Outline from Wood-Mason, Natural History Notes from H. M. Indian survey steamer *Investigator*, No. 21, Fig. 1. (One-half natural size.)

56. **Leptoderma macrops**, Vaillant 49
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XII, Fig. 2.

PLATE XVI.

57. **Xenodermichthys nodulosus**, Günther 46
Outline from Günther, Challenger Report, Vol. XXII, Pl. LVIII, Fig. C.

58. **Aleposomus socialis**, (Vaillant), Goode and Bean 18
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XIII, Fig. 1.

59. **Microstoma rotundatum**, (Risso), Günther 53
Outline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Vol. XVIII, Pl. 544.

60. **Harpodon macrochir**, Günther 59
Outline from Günther, Challenger Report, Vol. XXII, Pl. XLVII, Fig. A.

PLATE XVII.

61. **Argentina silus**, (Ascanius), Nilsson 52
Drawing by H. L. Todd, from No. 37801, U. S. N. M., collected by E. H. Bunker, Fletchers Neck Life-Saving Station, Biddeford, Me. (About one-half natural size.)

62. **Argentina striata**, Goode and Bean 52
Drawing by A. H. Baldwin, from type No. 43858, U. S. N. M., collected by the steamer *Albatross* at Station 2402, in N. lat. 28° 36′, W. lon. 85° 33′ 30″, at a depth of 111 fathoms.

63. **Bathylagus euryops**, Goode and Bean 55
Drawing by A. H. Baldwin, from 31861, U. S. N. M., collected by the steamer *Albatross* in N. lat. 39° 52′, W. lon. 70° 30′, at a depth of about 600 fathoms.

64. **Bathylagus Benedicti**, Goode and Bean 55
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at Station 2711, in N. lat. 38° 59′, W. lon. 70° 07′, at a depth of 1,344 fathoms.

PLATE XVIII.

65, 66. **Bathysaurus ferox**, Günther 58
Drawings by H. L. Todd, from a specimen obtained by the steamer *Blake* at Station CCCXLI, in N. lat. 39° 38′ 20″, W. lon. 70° 56′, at a depth of 1,241 fathoms.

67, 68. **Ipnops Murrayi**, Günther 67
Drawings by H. L. Todd, from a specimen collected by the steamer *Blake* at Station CCXXXIII, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms. (No. 67, three times natural size; No. 68, one and a half times.)

69. **Bathylaco nigricans**, Goode and Bean 57
Drawing by A. H. Baldwin, from the type specimen collected by the steamer *Blake* at Station XXXIX, off Santa Cruz, in 2,393 fathoms.

PLATE XIX.

70. **Chlorophthalmus Agassizii**, Bonaparte 60
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at Station 2314, in N. lat. 32° 43′, W. lon. 77° 51′, at a depth of 159 fathoms.

71. **Chlorophthalmus chalybeius**, Goode 60
Drawing by H. L. Todd, from No. 26092, U. S. N. M., collected by the steamer *Fish Hawk* at Stations 876–878, off Marthas Vineyard, in 120–142½ fathoms. (About one and a half times natural size.)

Text page.

72. **Chlorophthalmus truculentus**, Goode and Bean 61
Drawing by M. M. Smith, from the type specimen collected by the steamer *Blake* at Station LII, off Barbados, in 218 fathoms.

73. **Benthosaurus grallator**, Goode and Bean 62
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at Station CLXXIV, in N. lat. 24° 23′, W. lon. 84° 23′, at a depth of 1,850 fathoms.

PLATE XX.

74. **Bathypterois dubius**, Vaillant 64
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. IX.

75. **Bathypterois quadrifilis**, Günther 65
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Blake* at Station XCVIII, off St. Vincent.

76. **Bathypterois longipes**, Günther 66
Drawing by M. M. Smith, from No. 35635, U. S. N. M., collected by the steamer *Albatross* at Station 2225, in N. lat. 36° 05′ 30″, W. lon. 69° 51′ 45″, at a depth of 2,512 fathoms.

PLATE XXI.

77. **Rondeletia bicolor**, Goode and Bean 68
Drawing by H. L. Todd, from type No. 38202, U. S. N. M., collected by the steamer *Albatross* at Station 2724, in N. lat. 36° 47′, W. lon. 73° 25′, at a depth of 1,611 fathoms. (Enlarged one-half.)

78. **Cetomimus Gillii**, Goode and Bean 69
Drawing by M. M. Smith, from type No. 35529, U. S. N. M., collected by the steamer *Albatross* at Station 2206, in N. lat. 39° 35′, W. lon. 71° 24′ 30″, at a depth of 1,013 fathoms.

79. **Cetomimus Storeri**, Goode and Bean 69
Drawing by M. M. Smith, from type No. 35631, U. S. N. M., collected by the steamer *Albatross* at Station 2222, in N. lat. 39° 03′ 15″, W. lon. 70° 50′ 45″, at a depth of 1,535 fathoms.

PLATE XXII.

80. **Myctophum punctatum**, Rafinesque 71
Drawing by H. L. Todd, from No. 23369, U. S. N. M., collected by Capt. Matt. Ryan and crew, Gloucester fishing fleet, on the Grand Bank.

81. **Myctophum opalinum**, Goode and Bean 72
Drawing by J. C. Van Hook, from No. 43798, U. S. N. M., collected by the steamer *Albatross* at Station 2585, in N. lat. 39° 08′ 30″, W. lon. 72° 17′, at a depth of 512 fathoms. (Natural size.)

82. **Myctophum Humboldtii**, (Risso), Goode and Bean 73
Drawing by J. C. Van Hook, from No. 43772, U. S. N. M., collected by the steamer *Albatross* at Station 2727, in N. lat. 36° 35′, W. lon. 74° 03′ 30″, at a depth of 1,239 fathoms.

83. **Myctophum Benoiti**, (Cocco), Goode and Bean 74
Drawing by A. H. Baldwin, from a specimen collected at Messina, Italy, by Prof. H. H. Giglioli.

84. **Myctophum remiger**, Goode and Bean 75
Drawing by J. C. Van Hook, from type No. 43792, U. S. N. M., collected by the steamer *Albatross* at Station 2573, in N. lat. 40° 34′ 18″, W. lon. 66° 09′ 00″, at a depth of 1,742 fathoms.

85. **Benthosema Mülleri**, Goode and Bean 76
Drawing by A. H. Baldwin, from No. 28839, U. S. N. M., collected by the steamer *Fish Hawk* at Station 953, in N. lat. 39° 52′ 30″, W. lon. 70° 17′ 30″, at a depth of 721 fathoms.

PLATE XXIII.

86. **Lampanyctus crocodilus**, (Risso), Goode and Bean 79
Drawing by A. H. Baldwin, from a specimen collected at Nice, and obtained through the Royal Zoölogical Museum at Florence, Italy.

87. **Lampanyctus Gemellarii**, (Cocco), Goode and Bean 80
Drawing by A. H. Baldwin, from No. 44170, U. S. N. M., obtained from Messina by Prof. H. H. Giglioli, director of the Royal Zoölogical Museum, Florence, Italy.

88. **Lampanyctus gemmifer**, Goode and Bean 80
Drawing by A. H. Baldwin, from type No. 35601, U. S. N. M., collected by the steamer *Albatross* at Station 2201, in N. lat. 39° 39′ 45″, W. lon. 71° 35′ 15″, at a depth of 538 fathoms.

PLATE XXIV.

Text page.

89. **Lampanyctus lacerta**, Goode and Bean 81
Drawing by A. H. Baldwin, from type No. 43778, U. S. N. M., collected by the steamer *Albatross* at Station 2101, in N. lat. 28° 38′ 30″, W. lon. 85° 52′ 30″, at a depth of 142 fathoms.

90. **Lampanyctus Güntheri**, Goode and Bean 79
Drawing by A. H. Baldwin, from type No. 43777, U. S. N. M., (Gloucester Donation No. 199), collected by the schooner *John Smith*, Capt. Peter Johnson, on Georges Bank, in 45 fathoms.

91. **Ceratoscopelus maderensis**, (Lowe), Goode and Bean 82
Drawing by J. C. Van Hook, from No. 43776, U. S. N. M., collected by the steamer *Albatross* at Station 2528, in N. lat. 41° 47′, W. lon. 65° 37′ 30″, at a depth of 677 fathoms. (Nearly twice natural size.)

92. **Lampanyctus alatus**, Goode and Bean 79
Drawing by A. H. Baldwin, from type No. 43769, U. S. N. M., collected by the steamer *Albatross* at Station 2393, in N. lat. 28° 43′, W. lon. 87° 14′ 30″, at a depth of 525 fathoms.

93. **Diaphus theta**, Eigenmann and Eigenmann 89
Drawing by A. H. Baldwin, from the type specimen taken at moderate depth off Point Loma, near San Diego, Cal.

PLATE XXV.

94. **Notoscopelus resplendens**, (Richardson), Goode and Bean 83
Copied by A. H. Baldwin, from Richardson, Voyage of the Erebus and Terror, Pl. XXVII, Fig. 16.

95. **Notoscopelus castaneus**, Goode and Bean 84
Drawing by A. H. Baldwin, from type No. 31706, U. S. N. M., collected by the steamer *Fish Hawk* at Station 1113, in N. lat. 39° 57′, W. lon. 70° 37′, at a depth of 192 fathoms.

96. **Notoscopelus caudispinosus**, (Johnson), Goode and Bean 84
Drawing by A. H. Baldwin, from No. 43768, U. S. N. M., collected by the steamer *Albatross* at Station 2569, in N. lat. 39° 26′, W. lon. 68° 03′ 30″, at a depth of 1,782 fathoms.

PLATE XXVI.

97. **Notoscopelus quercinus**, Goode and Bean 83
Drawing by A. H. Baldwin, from type No. 43789, U. S. N. M., (Gloucester Donation No. 822), collected by Capt. Frank Carroll and crew, of the schooner *Polar Wave*, off St. Peter's and Banquereux.

98. **Notoscopelus margaritiferus**, Goode and Bean 84
Drawing by A. H. Baldwin, from No. 43774, U. S. N. M., (Gloucester Donation 404), collected by Capt. G. H. Curtis and crew, of the schooner *Conductor*, in N. lat. 44° 10′, W. lon. 58°, at a depth of 300 fathoms.

99. **Lampadena speculigera**, Goode and Bean 85
Drawing by J. C. Van Hook, from type No. 43797, U. S. N. M., collected by the steamer *Fish Hawk* at Station 797, off Newport, R. I., at a depth of 16½ fathoms.

100. **Collettia Rafinesquei**, (Cocco), Goode and Bean 88
Drawing by H. L. Todd, from No. 33550, U. S. N. M., collected by the steamer *Albatross*, at Station 2099, in N. lat. 37° 12′ 20″, W. lon. 69° 39′ 00″, at a depth of 2,919 fathoms.

PLATE XXVII.

101. **Æthoprora metopoclampa**, (Cocco), Goode and Bean 86
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at Station, 2127, in N. lat. 19° 45′, W. lon. 75° 04′ 00″, at a depth of 1,639 fathoms; and a specimen from Messina, obtained from Prof. H. H. Giglioli, director of the Royal Zoölogical Museum, Florence, Italy.

102. **Æthoprora lucida**, Goode and Bean 87
Drawing by A. H. Baldwin, from No. 44084, U. S. N. M., collected by the steamer *Albatross*, at Station 2127, in N. lat. 19° 45′, W. lon. 75° 04′ 00″, at a depth of 1,639 fathoms.

103. **Æthoprora effulgens**, Goode and Bean 87
Drawing by A. H. Baldwin, from No. 43770, U. S. N. M., collected by Capt. Cuddy and crew of the schooner *Joseph O.*, on Brown's Bank.

PLATE XXVIII.

Text page.

104. **Rhinoscopelus Coccoi**, (Cocco), Goode and Bean 90
Drawing by J. C. Van Hook, from No. 13822, U. S. N. M., collected by the steamer *Albatross*, in a towing net, in N. lat. 39°, W. lon. 72°. (About twice natural size.)

105. **Tarletonbeania tenua**, Eigenmann and Eigenmann 89
Drawing by A. H. Baldwin, from No. 41882, U. S. N. M., collected by C. H. Eigenmann, off Point Loma, near San Diego, Cal.

106. **Dasyscopelus asper**, (Richardson), Goode and Bean 92
Copied by A. H. Baldwin, from Richardson, Voyage of the Erebus and Terror, Pl. XXVII, Fig. 105.

107. **Electrona Rissoi**, (Cocco), Goode and Bean 91
Drawing by A. H. Baldwin, from No. 10062, U. S. N. M., from the Central Collection of Italian Vertebrata, Royal Zoölogical Museum, Florence, Italy. (Enlarged about one-half.)

PLATE XXIX.

108, 109. **Neoscopelus macrolepidotus**, Johnson 93
Drawings by M. M. Smith, from a specimen collected by the steamer *Blake*, at Station XLI, off Dominique, in 333 fathoms.

110. **Nannobrachium McDonaldi**, Goode and Bean 94
Drawing by S. F. Denton, from No. 35445, U. S. N. M., collected by the steamer *Albatross*, at Station 2182, in N. lat. 39° 25′ 30″, W. lon. 71° 44″, at a depth of 861 fathoms.

PLATE XXX.

111. **Maurolicus borealis**, (Nilsson), Günther 96
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross*, at Station 2102, in N. lat. 28° 36′, W. lon. 85° 33′, at a depth of 111 fathoms.

112. **Opisthoproctus soleatus**, Vaillant 95
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XIV, Fig. 1. (Nearly four times natural size.)

113. **Ichthyococcus ovatus**, (Cocco), Bonaparte 95
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XIV, Fig. 2.

114. **Cyclothone microdon**, (Günther), Goode and Bean 99
Drawing by H. L. Todd, from No. 29833, U. S. N. M., collected by the steamer *Fish Hawk*, at Station 953, off Marthas Vineyard, in N. lat. 39° 52′ 30″, W. lon. 70° 17′ 30″, at a depth of 724 fathoms. (Nearly twice natural size.)

PLATE XXXI.

115. **Chauliodus Sloanii**, Schneider 96
Drawing by H. L. Todd, from No. 23420, U. S. N. M., collected by Capt. Charles Anderson and crew, of the Gloucester fishing fleet, in N. lat. 42° 08′, W. lon. 65° 35′, at a depth of 185 fathoms. (About one-half natural size.)

116. **Gonostoma denudatum**, Rafinesque 98
Drawing from Bonaparte, Fauna Italica, folio 119, Fig. 1.

117. **Gonostoma brevidens**, Kner and Steindachner 98
Drawing by H. L. Todd, from No. 33368, U. S. N. M., collected by the steamer *Albatross*, at Station 2077, in N. lat. 41° 09′ 40″, W. lon. 66° 02′ 20″, at a depth of 1,255 fathoms. (Slightly reduced.)

118. **Cyclothone bathyphila**, (Vaillant), Goode and Bean 100
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross*, at Station 2531, in N. lat. 40° 01′, W. lon. 67° 29′ 15″, at a depth of 1,234 fathoms.

PLATE XXXII.

119. **Cyclothone elongata**, (Günther), Goode and Bean 101
Drawing by A. H. Baldwin, from No. 33291, U. S. N. M., collected by the steamer *Albatross*, at Station 2039, in N. lat. 38° 19′ 26″, W. lon. 68° 20′ 20″, at a depth of 2,369 fathoms. (Nearly twice natural size.)

120. **Bonapartia pedaliota**, Goode and Bean 102
Drawing by H. L. Todd, from the type specimens, collected by the steamer *Albatross*, at Station 2612, in N. lat. 25° 20′ 30″, W. lon. 79° 58′, at a depth of 217 fathoms. (Enlarged about one-half.)

Text page.

121. **Yarrella Blackfordii**, Goode and Bean 103
Drawing by A. H. Baldwin, from type No. 14242, U. S. N. M., collected by the steamer *Albatross*, at Station 2376, in N. lat. 29° 03′ 15″, W. lon. 88° 16″, at a depth of 324 fathoms. (Slightly reduced.)

122. **Photichthys argenteus**, Hutton 104
Drawing from Günther, Challenger Report, Vol. XXII, Pl. XLV. (About one-half natural size.)

PLATE XXXIII.

123. **Astronesthes niger**, Richardson 105
Drawing by A. H. Baldwin, from No. 34538, U. S. N. M., collected by Capt. Field, on a voyage from Mogador to New York, and presented to the National Museum by Mr. E. G. Blackford.

124. **Antronesthes gemmifer**, Goode and Bean 105
Drawing by A. H. Baldwin, from type No. 24645, U. S. N. M., obtained by the schooner *Polar Ware* from the stomach of a halibut, in N. lat. 44° 25′, W. lon. 53° 12′, at a depth of 300 fathoms.

125. **Astronesthes Richardsonii**, Poey 106
Drawing by M. M. Smith, from No. 35540, U. S. N. M., collected by the steamer *Albatross*, at Station 2202, in N. lat. 39° 38′ 00″, W. lon. 71° 39′ 45″, at a depth of 515 fathoms.

PLATE XXXIV.

126. **Diplophos tænia**, Günther 104
Drawing from Günther, Challenger Report, Vol. XXII, Pl. IV., (Enlarged nearly five times.)

127. **Stomias ferox**, Reinhardt 107
Drawing by H. L. Todd, from No. 23360, U. S. N. M. (Gloucester donation No. 190), collected by Capt. David Cammel and crew, of the Gloucester fishing fleet, at East Banquereux. (Three-fifths natural size.)

128. **Stomias boa**, (Risso), Cuvier 108
Drawing from Cuvier and Valenciennes, Histoire Naturelle des Poissons, Vol. XVIII, Pl. 545.

129. **Stomias affinis**, Günther 108
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIV, Fig. A.

PLATE XXXV.

130. **Echiostoma barbatum**, Lowe 109
Drawing by S. F. Denton, from No. 35624, U. S. N. M., collected by the steamer *Albatross*, at Station 2236, in N. lat. 39° 11′ 00″, W. lon. 72° 08′ 30″, at a depth of 636 fathoms. (Enlarged one-third.)

131. **Echiostoma margarita**, Goode and Bean 109
Drawing by A. H. Baldwin, from type No. 39282, U. S. N. M., collected by the steamer *Albatross*, at Station 2394, in N. lat. 28° 38′ 30″, W. lon. 87° 02′, at a depth of 420 fathoms.

132. **Opostomias micripnus**, Günther 110
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIII, Fig. A. (About one-half natural size.)

133. **Grammatostomias dentatus**, Goode and Bean 110
Drawing by H. L. Todd, from type No. 37370, U. S. N. M., collected by the steamer *Albatross*, at Station 2565, in N. lat. 38° 19′ 20″, W. lon. 69° 02′ 30″, at a depth of 2,069 fathoms. (Slightly enlarged.)

PLATE XXXVI.

134. **Pachystomias microdon** Günther 111
Outline from Günther, Challenger Report, Vol. XXII, Pl. LIII.

135. **Eustomias obscurus**, Vaillant 111
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. VIII, Fig. 3.

136. **Bathophilus nigerrimus**, Giglioli 111
Outline from Giglioli, "Pelagos." (Enlarged one-third.)

137. **Photonectes gracilis**, Goode and Bean 112
Drawing by M. M. Smith, from the type specimen collected by the steamer *Blake* at Station x.., off Martinique, in 472 fathoms.

PLATE XXXVII.

138. **Malacosteus niger**, Ayres 114
Drawing by H. L. Todd, from No. 32169 U. S. N. M. (Gloucester Donation, No. 797), collected by Capt. Charles Anderson and crew of the schooner *Alice G. Wonson*, on the northeastern edge of Georges Bank, in 125 fathoms. (Enlarged two-thirds.)

Text page.

139. **Malacosteus choristodactylus**, Vaillant 114
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. VIII. (Slightly enlarged.)

140. **Photostomias Guernei**, Collett 115
Outline from Lütken, Spolia Atlantica, p. 281. (Three and a half times natural size.)

141. **Thaumatostomias atrox**, Alcock 115
Drawing from Alcock, Annals and Magazine of Natural History, Vol. VI, Pl. VIII, Fig. 7.

PLATE XXXVIII.

142. **Alepisaurus ferox**, Lowe 117
Drawing by H. L. Todd, from No. 20593 U. S. N. M., obtained in a New York market by E. G. Blackford.

143. **Paralepis borealis**, (Reinhardt), Jordan and Gilbert 119
Drawing by H. L. Todd, from a specimen in the Academy of Natural Sciences, Montreal, Canada.

143A. **Paralepis coregonoides**, Risso 119
Outline from Bonaparte, Fauna Italica, Pl. XXVII.

144. **Sudis hyalina**, Ralfinesque 121
Outline from Bonaparte, Fauna Italica, Pl. XXVII.

145. **Odontostomus hyalinus**, Cocco 121
Outline from Günther, Challenger Report, Vol. XXII, Pl. LII, Fig. A.

PLATE XXXIX.

146. **Sternoptyx diaphana**, Lowe 124
Drawing by H. L. Todd, from a specimen obtained by the steamer *Blake* at Station CCCXVI, in N. lat. 32° 07′, W. lon. 78° 37′ 30″, at a depth of 229 fathoms.

146B. **Sternoptyx diaphana**, Lowe 124
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at Station CCCXXIII, in N. lat. 33° 19′, W. lon. 76° 12′ 30″, at a depth of 457 fathoms.

147. **Argyropelecus hemigymnus**, Cocco 126
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at Station 2117, in N. lat. 15° 24′ 40″, W. lon. 63° 31′ 30″, at a depth of 683 fathoms.

148. 148A. **Argyropelecus Olfersii**, (Cuvier), Cuvier and Valenciennes 126
Drawing by H. L. Todd, from No. 33393 U. S. N. M., collected at Station 2075, in N. lat 41° 40′ 30″, W. lon. 65° 35′ 00″, at a depth of 855 fathoms. (Natural size.)

149. **Polyipnus spinosus**, Günther 128
Drawing by H. L. Todd, from No. 37860 U. S. N. M., collected by the steamer *Albatross* at Station 2393, in N. lat. 28° 43′ 00″, W. lon. 87° 11′ 30″, at a depth of 525 fathoms. (Twice natural size.)

PLATE XL.

150. **Omosudis Lowei**, Günther 122
Outline from Günther, Challenger Report, Vol. XXII, Pl. LII.

151. **Idiacanthus ferox**, Günther 129
Outline from Günther, Challenger Report, Vol. XXII, Pl. LII, Fig. D.

152. **Halosaurus Owẹni**, Johnson 130
Drawing by A. H. Baldwin, from No. 31418 U. S. N. M., collected by the steamer *Albatross* at station 2181, in N. lat. 39° 29′, W. lon. 71° 46′, at a depth of 693 fathoms.

153. **Halosaurus Johnsonianus**, Vaillant 131
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XV, Fig. 2.

PLATE XLI.

154. **Aldrovandria rostrata**, (Günther), Goode and Bean 132
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIX.

155. 155A. **Aldrovandia macrochira**, (Günther), Goode and Bean 133
Drawings by H. L. Todd, from a specimen collected by the steamer *Blake* at Station LIII, off Havana, in 212 fathoms.

156. **Aldrovandia phalacrus**, (Vaillant), Goode and Bean 131
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XVI.

PLATE XLII.

Text page.

157. **Aldrovandia gracilis**, Goode and Bean 134
Drawing by S. F. Denton, from a specimen collected by the steamer *Blake* at Station LXX, off Guadalupe, at a depth of 769 fathoms. (About one-half natural size.)

158. **Aldrovandia pallida**, Goode and Bean 135
Drawing by H. L. Todd, from the type specimen collected by the Steamer *Blake* at Station CLXXIII, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms. (About seven-twelfths natural size.)

159. **Congermuræna flava**, Goode and Bean 138
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross* at Stations 2121 and 2122, between N. lat. 10° 37′ 40″, W. lon 61° 42′ 40″, and N. lat. 10° 37′ 00″, W. lon. 61° 44′ 22″, at a depth of 31 to 34 fathoms. (Five-sevenths natural size.)

160. **Uroconger vicinus**, Vaillant 138
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross* at Station 2161, in N. lat. 23° 10′ 36″, W. lon. 82° 20′ 28″, at a depth of 146 fathoms. (Slightly reduced.)

PLATE XLIII.

161. **Simenchelys parasiticus**, Gill 139
Drawing by H. L. Todd, from No. 21673, U. S. N. M., collected by Capt. N. McPhee, of the Gloucester fishing fleet, near Sable Island Bank. (Seven-tenths natural size.)

162. **Ilyophis brunneus**, Gilbert 141
Drawing by A. H. Baldwin, from type No. 44403, U. S. N. M., collected by the steamer *Albatross*, off the Galapagos Islands.

163. **Hoplunnis Diomedianus**, Goode and Bean 146
Drawing by J. C. Van Hook, from type No. 14210, U. S. N. M., collected by the steamer *Albatross* at Station 2402, in N. lat. 28° 36′, W. lon. 86° 50′, at a depth of 111 fathoms.

PLATE XLIV.

164. **Synaphobranchus pinnatus**, (Gronovius), Günther. 113
Drawing by H. L. Todd, from No. 21681, U. S. N. M., collected by Capt. Olsen, of the Gloucester fishing fleet, on Le Have Bank. (Three-fifths natural size.)

165. **Histiobranchus infernalis**, Gill 145
Drawing by H. L. Todd, from No. 38205, U. S. N. M., collected by the steamer *Albatross* at Station 2727, in N. lat. 36° 35′, W. lon. 74° 03′ 30″, at a depth of 1239 fathoms.

166. **Pisoodonophis cruentifer**, Goode and Bean 147
Drawing by A. H. Baldwin, from No. 28938, U. S. N. M., collected by the steamer *Fish Hawk* at Station 1035, in N. lat. 39° 57′, W. lon. 69° 28′, at a depth of 120 fathoms. (Slightly reduced.)

167. **Myrus pachyrhynchus**, Vaillant. 148
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. v, Fig. 1. (About one-half natural size.)

168. **Venefica procera**, (Goode and Bean), Jordan and Davis. 149
Drawing by H. L. Todd, from a specimen collected by the *Blake* at Station CLIII, in N. lat. 16° 13′ 45″, W. lon. 62° 16′ 12″, at a depth of 303 fathoms. (Seven-twelfths natural size.)

169, 169A, B. **Derichthys serpentinus**, Gill 161
Drawings by H. L. Todd, from type No. 33523, U. S. N. M., collected by the steamer *Albatross*, at station 2094, in N. lat. 39° 44′ 30″, W. lon. 71° 04′, at a depth of 1,022 fathoms.

PLATE XLVI.

170. **Nemichthys scolopaceus**, Richardson. 152
Drawing by H. L. Todd, from a specimen collected by William Parsons, on East Georges Bank.

171. **Labichthys carinatus**, Gill and Ryder. 153
Drawing by A. H. Baldwin, from type No. 33369, U. S. N. M., collected by the steamer *Albatross*, at station 2076, in N. lat. 41° 13′, W. lon. 65° 33′ 30″, at a depth of 906 fathoms. (Slightly reduced.)

172. **Labichthys elongatus**, Gill and Ryder. 153
Drawing by A. H. Baldwin, from type No. 33577, U. S. N. M., collected by the steamer *Albatross*, at station 2100, in N. lat. 39° 22′, W. lon. 68° 34′ 30″, at a depth of 1,628 fathoms.

PLATE XLVII.

Text page.

173. **Labichthys infans**, (Günther), Goode and Bean 153
Drawing by A. H. Baldwin, from type No. 44239, U. S. N. M., collected by the steamer *Albatross*, at station 2859, in N. lat. 55° 20′, W. lon. 136° 20′, at a depth of 1,569 fathoms. (About one-half natural size.)

174. **Labichthys infans** (after Günther) 154
Outline from Günther, Challenger Report, Vol. XXII, Pl. LXIII.

175. **Serrivomer Beanii**, Gill and Ryder 155
Drawing by A. H. Baldwin, from No. 33383, U. S. N. M., collected by the steamer *Albatross*, at station 2075, in N. lat. 41° 40′ 30″, W. lon. 65° 28′ 30″, at a depth of 855 fathoms. (About one and two-thirds natural size.)

PLATE XLVIII.

176. **Cyema atrum**, Günther 154
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIV, Fig. D. (About natural size.)

177. **Eurypharynx pelecanoides**, Vaillant 159
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XVII. (About one-half natural size.)

178. **Saccopharynx flagellum**, Mitchill 157
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LXVI. (Enlarged about one-half.)

PLATE XLIX.

179, 180. **Saccopharynx flagellum**, Mitchill 157
Drawings by H. L. Todd, from No. 37988, U. S. N. M., collected by the steamer *Albatross*, at station 2717, in N. lat. 38° 24′, W. lon. 71° 13′, at a depth of 1,615 fathoms. (No. 179, one-third natural size; No. 180, one-half.)

181, 182. **Gastrostomus Bairdii**, Gill and Ryder 159
Drawings by H. L. Todd, from No. 33386, U. S. N. M., collected by the steamer *Albatross*, at station 2074, in N. lat. 41° 43′, W. lon. 65° 21′ 50″, at a depth of 1,309 fathoms.

PLATE L.

183. **Notacanthus nasus**, Bloch 164
Drawing from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Pl. 241.

184. **Notacanthus analis**, Gill 165
Drawing by H. L. Todd, from type No. 37856, U. S. N. M., collected by the steamer *Albatross*, at station 2677, in N. lat. 32° 39′, W. lon. 76° 50′ 30″, at a depth of 478 fathoms. (About one-half natural size.)

185. **Notacanthus Bonapartii**, Risso 166
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVII, Fig. 2. (Reduced about one-third.)

186. **Notacanthus phasganorus**, Goode 167
Drawing by H. L. Todd, from type No. 25972, U. S. N. M., collected by Capt. Briggs Gilpatrick, of the schooner *Gatherer*, from the stomach of a Ground-shark, on the Grand Bank of Newfoundland. (One-fourth natural size.)

PLATE LI.

187. **Gigliolia Moseleyi**, Goode and Bean 169
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LXI, Fig. C. (One-half natural size.)

188. **Polyacanthonotus Rissoanus** (De Filippi and Verany), Günther 170
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVII.

189. **Macdonaldia rostrata**, (Collett), Goode and Bean 171
Drawing by M. M. Smith, from type No. 35601, U.S. N. M., collected by the steamer *Albatross*, at station 2216, in N. lat. 39° 47′, W. lon. 70° 30′ 30″, at a depth of 963 fathoms.

190. **Lipogenys Gillii**, Goode and Bean 173
Drawing by H. L. Todd, from No. 39212, U. S. N. M., collected by the steamer *Albatross*, at station 2712, in N. lat. 37° 46′ 30″, W. lon 73° 56′ 30″, at a depth of 865 fathoms. (About one-half natural size.)

PLATE LII.

Text page.

191A, B. **Notacanthus analis**, Gill 165
Drawings by A. H. Baldwin, from No. 37856, U. S. N. M., collected by the steamer *Albatross*, at station 2677, in N. lat. 32° 39′, W. lon. 76° 50′ 30″, at a depth of 478 fathoms.

192A, B. **Notacanthus sexspinis**, Richardson 163
Drawings from Günther, Challenger Report, Vol. XXII, Pl. LXI, Fig. a.

193. **Gigliolia Moseleyi**, Goode and Bean 169
Drawing from Günther, Challenger Report, Vol. XXII, Pl. LXI, Fig. C.

194A, B. **Polyacanthonotus Rissoanus**, (De Filippi and Verany), Günther 170
Drawings from Günther, Challenger Report, Vol. XXII, Pl. LXI.

195A, B. **Macdonaldia rostrata**, (Collett), Goode and Bean 171
Drawings by A. H. Baldwin, from Nos. 35601–2, U. S. N. M., collected by the steamer *Albatross*, at station 2216, in N. lat. 39° 47′, W. lon. 70° 30′ 30″, at a depth of 963 fathoms.

196A, B. **Lipogenys Gillii**, Goode and Bean 173
Drawings by A. H. Baldwin, from No. 39212, U. S. N. M., collected by the steamer *Albatross*, at station 2742, in N. lat. 37° 46′ 30″, W. lon. 73° 56′ 30″, at a depth of 865 fathoms.

PLATE LIII.

197. **Beryx splendens**, Lowe 176
Drawing by M. M. Smith, from a specimen collected by the steamer *Albatross*, at station 2115, in N. lat. 30° 44′, W. lon. 79° 26′, at a depth of 440 fathoms.

198. **Melamphaes typhlops**, (Lowe), Günther 177
Drawing from Günther, Challenger Report, Vol. XXII, Pl. V, Fig. A.

199. **Scopelogadus cocles**, Vaillant 182
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVI. (Slightly reduced.)

200. **Poromitra capito**, Goode and Bean 183
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station CCCXXVIII, in N. lat. 34° 28′ 45″, W. lon. 75° 22′ 50″, at a depth of 1,632 fathoms. (Two and two-sevenths natural size.)

200A. **Plectromus crassiceps**, (Günther), Goode and Bean 180
Drawing from Günther, Challenger Report, Vol. XXII, Pl. VIII, Fig. B.

PLATE LIV.

201. **Plectromus suborbitalis**, Gill 179
Drawing by H. L. Todd, from type No. 33271, U. S. N. M., collected by the steamer *Albatross*, at station 2036, in N. lat. 38° 52′ 40″, W. lon. 69° 24′ 40″, at a depth of 1,735 fathoms. (One and three-fifths natural size.)

202. **Plectromus Beanii**, (Günther), Goode and Bean 179
Drawing by S. F. Denton, from No. 33378, U. S. N. M., collected by the steamer *Albatross*, at station 2075, in N. lat. 41° 40′ 30″, W. lon. 65° 35′, at a depth of 855 fathoms.

203. **Anoplogaster cornutus**, (Cuvier and Valenciennes), Günther 184
Drawing by H. L. Todd, from No. 33559, U. S. N. M., collected by the steamer *Albatross*, at station 2101, in N. lat. 39° 18′ 30″, W. lon. 68° 24′, at a depth of 1,686 fathoms.

PLATE LV.

204, 204A. **Caulolepis longidens**, Gill 185
Drawings by H. L. Todd, from No. 33270, U. S. N. M., collected by the steamer *Albatross* at station 2034, in N. lat. 39° 27′ 10″, W. lon. 69° 56′ 20″, at a depth of 1,346 fathoms.

205. **Stephanoberyx Monæ**, Gill 186
Drawing by H. L. Todd, from No. 33145 U. S. N. M., collected by the steamer *Albatross* at station 2077, in N. lat. 40° 09′ 40″, W. lon. 66° 02′ 20″, at a depth of 1,255 fathoms. (About three times natural size.)

PLATE LVI.

206. **Stephanoberyx Gillii**, Goode and Bean 187
Drawing by H. L. Todd, from type No. 33555, U. S. N. M., collected by the steamer *Albatross* at station 2099, in N. lat. 37° 12′ 20″, W. lon. 69° 39′ 00″, at a depth of 2,940 fathoms

Text page.

207. **Trachichthys Darwinnii**, Johnson 188
Drawing from Steindachner and Dœderlein, Denkschrift d. k. Akademie d. Wissenschaften Vol. XLVII, Pl. II.

208. **Hoplostethus mediterraneus**, Cuvier and Valenciennes 189
Drawing by A. H. Baldwin, from No. 43624, U. S. N. M., collected by the steamer *Albatross* at station 2659, in N. lat. 28° 32′, W. lon. 78° 42′, at a depth of 509 fathoms.

PLATE LVII.

209. **Thyrsitops violaceus**, Bean 195
Drawing by S. F. Denton, from type No. 39287, U. S. N. M., collected by Capt. Thomas Thompson, of the Gloucester fishing fleet, on Le Have Bank, at a depth of 125 fathoms. (One-seventh natural size.)

210. **Ruvettus pretiosus**, Cocco 196
Drawing by J. C. Van Hook, from a specimen collected by Capt. Thompson of the schooner *M. A. Baston* on Georges Bank.

211. **Epinnula magistralis**, Poey 198
Drawing by H. L. Todd, from No. 37238, U. S. N. M., collected by the steamer *Albatross* in the Carribbean Sea. (About one-third natural size.)

212. **Dicrotus parvipinnis**, Goode and Bean 201
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Albatross* at station 2601, off Cape Hatteras, in N. lat. 34° 39′ 15″, W. lon. 75° 33′ 30″, at a depth of 107 fathoms.

PLATE LVIII.

213. **Lepidopus caudatus**, (Euphrasen), White 203
Drawing by A. H. Baldwin, from No. 10115, U. S. N. M., collected by John Xantus, off Cape St. Lucas.

214. **Evoxymetopon tæniatus**, Poey 204
Drawing by H. L. Todd, from No. 5735, U. S. N. M., collected by Prof. Félipe Poey at Havana, Cuba. (About two-ninths natural size.)

215. **Benthodesmus atlanticus**, Goode and Bean 205
Drawing by H. L. Todd, from type No. 29116, U. S. N. M., taken from the stomach of a halibut, by Capt. R. Morrison, of the schooner *Laura Nelson*, on the west edge of the Grand Bank of Newfoundland, in 80 fathoms. (About one-third natural size.)

PLATE LIX.

216. **Aphanopus carbo**, Lowe 207
Outline from Günther, Challenger Report, Vol. XXII, Pl. VII, Fig. A.

217. **Trichiurus lepturus**, Linnæus 208
Drawing by H. L. Todd, from No. 18028, U. S. N. M., collected by Dr. Janeway, U. S. Navy, at St. Augustine, Fla.

218. **Pteraclis carolinus**, Cuvier and Valenciennes 212
Drawing by H. L. Todd, from No. 37861, U. S. N. M., collected by the steamer *Albatross* at station 2660, in N. lat. 28° 40′ 00″, W. lon. 78° 46′ 00″, at a depth of 504 fathoms. (Enlarged one-half.)

PLATE LX.

219. **Coryphæna hippurus**, Linnæus (old male) 209
Drawing by H. L. Todd, from No. 16182, U. S. N. M., obtained in Fulton Market, New York City, by E. G. Blackford.

220. **Coryphæna hippurus**, Linnæus (young) 209
Drawing by H. L. Todd, from No. 16181, U. S. N. M., obtained in the Fulton Market, New York City, by E. G. Blackford.

220.A, B. **Coryphæna hippurus**, Linnæus 209
Sketches from Lütken, Spolia Atlantica, I, p. 486.

PLATE LXI.

221. **Grammicolepis brachiusculus**, Poey 218
Copied from a drawing by Shufeldt, Journal of Morphology, Vol. II. (One-third natural size.)

Text page.

222. **Centrolophus pompilus**, (Gmelin), Cuvier and Valenciennes 211
Drawing by S. F. Denton, from a specimen obtained at Dennis, Mass., by Vinal N. Edwards. (About two-thirds natural size.)

223. **Schedophilus medusophagus**, Cocco 211
Drawing from Günther, Transactions of the Zoölogical Society of London, Vol. XI, Pl. LXVII.

PLATE LXII.

224. **Icosteus enigmaticus**, Lockington 215
Drawing by Günther, Challenger Report, Vol. XXII, Pl. XLIV. (Slightly reduced.)

225. **Acrotus Willoughbyi**, Bean 217
Drawing by S. F. Denton, from No. 39340, U. S. N. M., collected off the coast of Washington, by Charles Willoughby. (About one-ninth natural size.)

226. **Icichthys Lockingtonii**, Jordan and Gilbert 216
Drawing by A. H. Baldwin, from No. 27397, U. S. N. M., collected off the coast of Washington. (Slightly reduced.)

PLATE LXIII.

227. **Nomeus Gronovii**, (Gmelin), Günther 220
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross* at station 2647, in N. lat. 25° 48′ 00″, W. lon. 80° 04′ 00″, at a depth of 85 fathoms. (Enlarged one-third.)

228. **Psenes pellucidus**, Lütken 221
Drawing by M. M. Smith, from No. 35115, U. S. N. M., collected by the steamer *Albatross* at station 2171, in N. lat. 37° 59′ 30″, W. lon. 73° 48′ 40″, at a depth of 444 fathoms.

229. **Psenes maculatus**, Lütken 221
Drawing by H. L. Todd, from No. 39329, U. S. N. M., collected by the steamer *Albatross* at station 2628, in N. lat. 32° 24′, W. lon. 76° 55′ 30″, at a depth of 528 fathoms. (Nearly twice natural size.)

PLATE LXIV.

230. **Luvarus imperialis**, Rafinesque 222
Outline from Day, Fishes of Great Britain and Ireland, Pl. XLIII.

231. **Glossamia pandionis**, Goode and Bean 231
Drawn by H. L. Todd, from type No. 26628, U. S. N. M., collected by the steamer *Fish Hawk* at station 897, in N. lat. 37° 25′, W. lon. 74° 18′, at a depth of 157½ fathoms. (Enlarged about one-fourth.)

232. **Verilus sordidus**, Poey 240
Drawing by A. H. Baldwin, from No. 12565, U. S. N. M., collected by Prof. Félipe Poey, off Cuba. (Slightly less than one-half natural size.)

PLATE LXV.

233, 233A, B. **Cyttus hololepis**, Goode and Bean 225
Drawings by H. L. Todd, from type No. 39296, U. S. N. M., collected by the steamer *Albatross* at station 2358, in N. lat. 20° 19′, W. lon. 87° 03′ 30″, at a depth of 220 fathoms. (Enlarged nearly one-half.)

234. **Diretmus argenteus**, Johnson 211
Drawing from Johnson, Proceedings of the Zoölogical Society of London, Pl. XXXVI.

235. **Antigonia capros**, Lowe 229
Drawings from Temminck and Schlegel, Fauna Japonica, Pl. XLII.

PLATE LXVI.

236. **Epigonus occidentalis**, Goode and Bean 233
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Blake* at station LIV, off Barbadoes, in 237 fathoms. (Natural size.)

237. **Hypoclydonia bella**, Goode and Bean 236
Drawing by S. F. Denton, from No. 39338, U. S. N. M., collected by the steamer *Albatross* at station 2426, in N. lat. 36° 01′ 30″, W. lon. 74° 47′ 30″, at a depth of 93 fathoms. (About one and two-thirds natural size.)

238. **Polyprion americanum**, (Schneider), Jordan 238
Drawing by H. L. Todd, from a specimen collected by the U. S. Fish Commission, on the Grand Bank.

Text page.

239, 240. **Pseudopriacanthus altus**, Gill 242
Drawings by H. L. Todd, from a specimen collected by the steamer *Albatross* at station 2606, in N. lat. 34° 35′ 15″, W. lon, 75° 52′ 00″, at a depth of 25 fathoms. (No. 239, eight times natural size; No. 240, four times.)

PLATE LXVII.

241. **Polymixia nobilis**, Lowe 243
Drawing from Günther, Challenger Report, Vol. XXII, Pl. I, Fig. B.

242. **Scorpæna cristulata**, Goode and Bean 246
Drawing by H. L. Todd, from type No. 39326, U. S. N. M., collected by the steamer *Albatross* at station 2415, in N. lat. 30° 14′, W, lon. 79° 26, at a depth of 440 fathoms.

243. **Scorpæna Agassizii**, Goode and Bean 247
Drawing by M. M. Smith, from the type specimen collected by the steamer *Blake* at station CCLIX, in N. lat. 23° 13′, W. lon. 74° 52′, at a depth of 80 fathoms.

PLATE LXVIII.

244. **Helicolenus maderensis**, Goode and Bean 250
Drawing by H. L. Todd, from No. 26627, U. S. N. M., collected by the steamer *Fish Hawk* at station 897, in N. lat. 37° 25′, W. lon. 71° 18′, at a depth of 157½ fathoms. (Slightly reduced.)

245. **Pontinus Rathbuni**, Goode and Bean 255
Drawing by A. H. Baldwin, from No. 39526, U. S. N. M., collected by the steamer *Albatross* at station 2298, in N. lat. 35° 39′, W. lon. 74° 52′, at a depth of 80 fathoms.

246. **Pontinus longispinis**, Goode and Bean 258
Drawing by H. L. Todd, from type No. 39322, U. S. N. M., collected by the steamer *Albatross* at station 2402, in N. lat. 28° 36′, W. lon. 85° 33′ 30″, at a depth of 111 fathoms.

PLATE LXIX.

247. **Pontinus macrolepis**, Goode and Bean 257
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Blake* at station CIV, off Barbadoes, at a depth of 500 fathoms.

248. **Sebastes marinus**, (Linnæus), White 260
Drawing by H. L. Todd, from No. 10142, U. S. N. M., collected at Eastport, Me.

PLATE LXX.

249. **Setarches parmatus**, Goode 264
Drawing by H. L. Todd, from type No. 26084, U. S. N. M., collected by the steamer *Fish Hawk* at station 876, off Martha's Vineyard, in N. lat. 39° 57′ 00″, W. lon. 70° 56′ 00″, at a depth of 120 fathoms. (Twice natural size.)

250. **Eumicrotremus spinosus**, (Müller), Gill 272
Drawing by H. L. Todd, from a specimen collected off Half Way Rock, Salem, Mass., at a depth of 35 fathoms. (About three times natural size.)

251, 251A, B. **Careproctus ranula**, Goode and Bean 275
Drawings by H. L. Todd, from No. 22310, U. S. N. M., collected by the steamer *Speedwell* at station 117, off the mouth of Halifax Harbor. (Little less than twice natural size.)

252. **Monomitra liparina**, Goode 278
Drawn by H. L. Todd, from type No. 26184, U. S. N. M., collected by the steamer *Fish Hawk* at station 891, in N. lat. 39° 46′, W. lon. 71° 10′, at a depth of 480 fathoms.

PLATE LXXI.

253. **Paraliparis Copei**, Goode and Bean 279
drawing by H. L. Todd, from No. 35637, U. S. N. M., collected by the steamer *Albatross* at station 2232, in N. lat. 39° 12′ 17″, W. lon. 72° 09′ 30″, at a depth of 520 fathoms. (Slightly reduced.)

254. **Gymnolycodes Edwardsi**, Vaillant 281
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVI.

255. **Artediellus uncinatus**, (Reinhardt), Jordan 267
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at station 2477, in N. lat. 44° 29′ 30″, W. lon. 57° 11′ 15″, at a depth of 114 fathoms. (About two-and-a-half times natural size.)

Text page.

256. **Triglops Pingelii**, Reinhardt 269
Drawing by H. L. Todd, from a specimen collected by the steamer *Speedwell* at station 117, 8 miles off Chebucto, at a depth of 52 fathoms. (Enlarged about one-half.)

PLATE LXXII.

257. **Cottunculus microps**, Collett 269
Drawing by H. L. Todd, from No. 26087, U. S. N. M., collected by the steamer *Fish Hawk* at station 880, in N. lat. 38° 18′ 30″, W. lon. 70° 54′, at a depth of 252½ fathoms. (Natural size.)

258. **Cottunculus Thomsonii**, Günther 270
Drawing by H. L. Todd, from No. 37386, U. S. N. M., collected by the steamer *Albatross* at station 2584, in N. lat. 39° 05′ 30″, W. lon. 72° 23′ 20″, at a depth of 541 fathoms. (Seven-twelfths natural size.)

259. **Podothecus decagonus**, (Schneider), Jordan 282
Drawing from Collett, Norsk. Nordhavs Expedition, Pl. II, Fig. 11.

260. **Aspidophoroides monopterygius**, (Bloch), Goode and Bean 283
Drawing by H. L. Todd, from No. 21761, U. S. N. M., collected by the steamer *Speedwell* at Sandwich Point, Halifax, in 18 fathoms. (Enlarged about one-half.)

PLATE LXXIII.

261A. B. **Cottunculus microps**, Collett 269
Drawing by H. L. Todd, from No. 26087, U. S. N. M., collected by the steamer *Fish Hawk* at station 880, in N. lat. 38° 48′ 30″, W. lon. 70° 54′, at a depth of 252½ fathoms. (Natural size.)

262A, B. **Cottunculus Thomsonii**, Günther 270
Drawings by H. L. Todd, from No. 37386, U. S. N. M., collected by the steamer *Albatross* at station 2584, in N. lat. 39° 05′ 30″, W. lon. 72° 23′ 20″, at a depth of 541 fathoms. (Natural size.)

PLATE LXXIV.

263, 263A, B. **Hypsicometes gobioides**, Goode 290
Drawings by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at station 2377, in N. lat. 29° 07′ 30″, W. lon. 88° 08′, at a depth of 210 fathoms.

264, 264A. **Chiasmodon niger**, Johnson 292
Drawings by H. L. Todd, from No. 25633, U. S. N. M., collected at the surface by Capt. Thomas F. Hodgdon of the schooner *Bessie W. Somes*, on Le Have Bank.

PLATE LXXV.

265. **Lopholatilus chamæleonticeps**, Goode and Bean 281
Drawing by H. L. Todd, from No. 22899, U. S. N. M., collected by Capt. Kirby, 80 miles south by east of No Man's Land.

PLATE LXXVI.

266. **Pseudoscopelus scriptus**, Lütken 292
Drawing from Lütken, Spolia Atlantica, Pl. I, Fig. 3. (About three times natural size.)

267. **Porichthys porosissimus**, (Cuvier and Valenciennes), Günther 294
Outline by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at station 2121, in N. lat. 10° 37′ 40″, W. lon. 61° 42′ 40″ at a depth of 31 fathoms.

268, 268A, B. **Callionymus himantophorus**, Goode and Bean 296
Drawings by H. L. Todd, from a specimen collected by the steamer *Blake* at station XXX, off Barbados, in 209 fathoms. (Natural size.)

PLATE LXXVII.

269. **Anarrhichas lupus**, Linnæus 299
Drawing by H. L. Todd, from No. 21846, U. S. N. M., collected by Capt. John Gourville, of the Gloucester fishing fleet, on Georges Bank.

270. **Anarrhichas minor**, Olafsen 301
Drawing by H. L. Todd, from No. 21618, U. S. N. M., collected by Capt. R. H. Hurlbert, in N. lat. 42° 27′, W. lon. 64° 20′.

Text page.

271. **Anarrhichas latifrons**, Steenstrup and Hallgrimsson 301
Drawing by H. L. Todd, from No. 21373, U. S. N. M., collected by Capt. Joseph W. Collins, of the schooner *Marion*, in N. lat. 43° 56′, W. lon. 59° 04′. (About one-fourth natural size.)

PLATE LXXVIII.

272. **Lycodes Esmarkii**, Collett 303
Drawing by H. L. Todd, from No. 21991, U. S. N. M., collected by Capt. Z. Hawkins and crew, of the schooner *Gwendolen*, on Le Have Bank, in 400 fathoms. (About two-sevenths natural size.)

273. **Lycodes reticulatus**, Reinhardt 305
Drawing by H. L. Todd, collected by Capt. R. Markuson and crew, of the Gloucester fishing fleet, southwest of Banquereux, in 300 fathoms.

274. **Lycodes frigidus**, Collett 305
Drawing by H. L. Todd, from No. 32995, U. S. N. M., collected by the steamer *Albatross* at station 2018, in N. lat. 37° 12′ 22″, W. lon. 74° 20′ 04″, at a depth of 788 fathoms. (About two-fifths natural size.)

275. **Lycodes mucosus**, Richardson 306
Drawing by H. L. Todd, from No. 16930, U. S. N. M., collected in Cumberland Gulf, by W. A. Mintzer. (About two-fifths natural size.)

PLATE LXXIX.

276. **Lycodes zoarchus**, Goode and Bean 308
Drawing by S. F. Denton, from type No. 39298, U. S. N. M., collected by steamer *Albatross*, off Nova Scotia in N. lat. 44° 46′ 30″, W. lon. 59° 55′ 45″, at a depth of 130 fathoms.

276A. **Lycodes zoarchus**, Goode and Bean 308
Drawing by S. F. Denton, from No. 39299, U. S. N. M., collected by the steamer *Albatross* at station 2486, in N. lat. 44° 26′, W. lon. 57° 11′ 15″, at a depth of 190 fathoms.

277, 277A. **Lycenchelys Verrillii**, Goode and Bean 309
Drawings by H. L. Todd, from No. 21015, U. S. N. M., collected by the U. S. Fish Commission, 27 miles southwest of Chebucto.

PLATE LXXX.

278. **Lycodes perspicillum**, Kröyer 307
Drawing by H. L. Todd, from No. 39336, U. S. N. M., collected by steamer *Albatross* at station 2456, in N. lat. 47° 29′, W. lon. 52° 18′, at a depth of 86 fathoms. (Twice natural size.)

278A. **Lycodes perspicillum**, Kröyer 307
Drawing by S. F. Denton, from No. 39337, U. S. N. M., collected by the steamer *Albatross* at station 2491, in N. lat. 45° 25′ 30″, W. lon. 58° 35′ 15″, at a depth of 59 fathoms. (Nearly four times natural size.)

279. **Lycenchelys paxillus**, Goode and Bean 311
Drawing by H. L. Todd, from No. 22177, U. S. N. M., collected by Capt. Joseph Collins, of the Gloucester fishing fleet, in N. lat. 42° 48′, W. lon. 63° 07′. (About one-half natural size.)

279A. **Lycenchelys paxillus**, Goode and Bean 311
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at station CCCIX, in N. lat. 40° 11′ 40″, W. lon. 68° 22′, at depth of 304 fathoms.

280. **Lycodonus mirabilis**, Goode and Bean 312
Drawing by S. F. Denton, from No. 39207, U. S. N. M., collected by the steamer *Albatross* at station 2742, in N. lat. 37° 46′ 30″, W. lon. 73° 56′ 30″, at a depth of 865 fathoms.

PLATE LXXXI.

281A, B. **Lycodes reticulatus**, Reinhardt 305
Drawing by H. L. Todd, from a specimen collected by Capt. R. Markuson, southwest of Banquereux, in 300 fathoms. (One-half natural size.)

282. **Lycenchelys paxillus**, Goode and Bean 311
Drawing by H. L. Todd, from No. 22177, U. S. N. M., collected by Capt. Joseph W. Collins of the Gloucester fishing fleet, in N. lat. 42° 48′, W. lon. 63° 07′. (Natural size.)

Text page.

283A, B. **Lycodes mucosus**, Richardson 306
Drawings by H. L. Todd, from No. 16930, U. S. N. M., collected by W. A. Mintzer, in Cumberland Gulf. (Three-fourths natural size.)

283C. **Lycodes zoarchus**, Goode and Bean 308
Drawing by H. L. Todd, from type No. 39298, U. S. N. M., collected by the steamer *Albatross*, off Nova Scotia, in N. lat. 44° 46′ 30″, W. lon. 59° 55′ 45″, at a depth of 130 fathoms.

PLATE LXXXII.

284. **Melanostigma gelatinosum**, Günther 314
Drawing by H. L. Todd, from No. 28853, U. S. N. M., collected by the steamer *Fish Hawk* at station 952, in N. lat. 39° 55′, W. lon. 70° 28′, at a depth of 396 fathoms. (Enlarged one-half.)

285. **Dicromita Agassizii**, Goode and Bean 319
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake* at station XCIII, off Granada, in 291 fathoms.

285A, B. **Dicromita Agassizii**, Goode and Bean 319
Drawings by H. L. Todd, from type No. 26023, U. S. N. M., collected by the steamer *Fish Hawk* at station 869, in N. lat. 40° 02′ 18″, W. lon. 70° 23′ 06″, at a depth of 192 fathoms.

286. **Bassozetus catena**, Goode and Bean 323
Drawing by S. F. Denton, from type No. 37341, U. S. N. M., collected by the steamer *Albatross* at station 2379, in N. lat. 28° 00′ 15″, W. lon. 87° 42′, at a depth of 1,467 fathoms. (About seven-ninths natural size.)

287. **Bassozetus normalis**, Gill 322
Drawing by H. L. Todd, from No. 49416, U. S. N. M., collected by the steamer *Albatross* at station 2380, in N. lat. 28° 02′ 30″, W. lon. 87° 43′ 45″, at a depth of 1,430 fathoms. (About seven-tenths natural size.)

288. **Benthocometes robustus**, Goode and Bean 327
Drawing by H. L. Todd, from No. 29057, U. S. N. M., collected by the steamer *Fish Hawk* at station 1043, in N. lat. 38° 39′, W. lon. 73° 11′, at a depth of 130 fathoms. (One and three-fifths natural size.)

PLATE LXXXIII.

289. **Neobythites Gillii**, Goode and Bean 325
Drawing by A. H. Baldwin, from type No. 37340, U. S. N. M., collected by the steamer *Albatross* at station 2402, in N. lat. 28° 36′, W. lon. 85° 33′, at a depth of 111 fathoms. (About twice natural size.)

290. **Neobythites marginatus**, Goode and Bean 326
Drawing by H. L. Todd, from the the type specimen collected by the steamer *Blake* at station LXXIX, off Barbadoes, in 209 fathoms. (One and three-fifths natural size.)

291. **Bassogigas Gillii**, Goode and Bean 328
Drawing by A. H. Baldwin, from No. 39117, U. S. N. M., collected by the steamer *Albatross* at station 2684, off Cape Henlopen, Delaware, in N. lat. 39° 35′, W. lon. 70° 54′, at a depth of 1,106 fathoms. (Slightly more than one-third natural size.)

292. **Porogadus miles**, Goode and Bean 334
Drawing by A. H. Baldwin, from type No. 35625, U. S. N. M., collected by the steamer *Albatross* at station 2230, in N. lat. 38° 27′, W. lon. 73° 02′, at a depth of 1,168 fathoms. (Enlarged about one-half.)

PLATE LXXXIV.

293. **Penopus Macdonaldi**, Goode and Bean 336
Drawing by S. F. Denton, from type No. 39433, U. S. N. M., collected by the steamer *Albatross* at Station 2716, in N. lat. 38° 29′ 30″, W. lon. 70° 57′, at a depth of 1,631 fathoms.

294. **Barathrodemus manatinus**, Goode and Bean 332
Drawing by H. L. Todd, from the type specimen collected by the steamer *Blake* at station CCCXXV, in N. lat. 33° 35′ 20″, W. lon. 76°, at a depth of 647 fathoms. (Slightly enlarged.)

Text page

295. **Nematonus pectoralis**, (Goode and Bean), Günther 333
Drawing by S. F. Denton, from type No. 37342, U. S. N. M., collected by the steamer *Albatross* at station 2380, in N. lat. 28° 02′ 30″, W. lon. 87° 43′ 45″, at a depth of 1,430 fathoms. (Slightly reduced.)

296A. **Mixonus laticeps**, Günther 339
Drawing from Günther, Challenger Report, Vol. XXII, Pl. XXV, Fig. B. (Five and a half times natural size.)

296B. **Tauredophidium Hextii**, Alcock 336
Outline from Alcock, Ann. & Mag. Nat. Hist., S. 6, Vol. VI, Pl. VIII, Fig. 1. (Nearly twice natural size.)

PLATE LXXXV.

297, 297A, B. **Dicrolene intronigra**, Goode and Bean 338
Drawings by H. L. Todd, from a specimen collected by the steamer *Blake* in the Gulf Stream. (No. 297, three-fourths natural size; Nos. 297A, B, natural size.)

298. **Barathronus bicolor**, Goode and Bean 341
Drawing by M. M. Smith, from the type specimen collected by the steamer *Blake*, at station LXXI, off Guadeloupe, in 769 fathoms.

299. **Aphyonis mollis**, Goode and Bean 342
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Blake* at station CCXXI, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms.

PLATE LXXXVI.

300. **Alexeterion parfaiti**, Vaillant 343
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXV (enlarged). (Four times natural size.)

301. **Hephthocara simum**, Alcock 344
Outline from Alcock, Annals and Magazine of Natural History, 1892, Pl. XVIII, Fig. 1. (Natural size.)

302. **Lamprogrammus niger**, Alcock 344
Drawing from Alcock, Annals and Magazine of Natural History, 1891, VIII, Fig. 2. (One-half natural size.)

303. **Rhodichthys regina**, Collett 342
Outline from Collett, Norsk. Nordhavs Exped. Fiske, Pl. V.

PLATE LXXXVII.

304. **Ptilichthys Goodei**, Bean 302
Drawing by H. L. Todd, from No. 26619, U. S. N. M., collected by Dall and Bean at the entrance to Port Levasheff, Unalaska, in 10 fathoms. (About twice natural size.)

305. **Otophidium omostigma**, Jordan 345
Drawing by H. L. Todd, from No. 29670, U. S. N. M., taken from the stomach of a red snapper at Pensacola, Fla. (Nearly twice natural size.)

306. **Leptophidium cervinum**, Goode and Bean 346
Drawing by H. L. Todd, from type No. 28764, U. S. N. M., collected by the steamer *Fish Hawk* at station 941, in N. lat. 40° 01′, W. lon. 69° 56′, at a depth of 76 fathoms. (About four-fifths natural size.)

307. **Leptophidium profundorum**, Gill 347
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Albatross* at station 2042, in N. lat. 39° 33′, W. lon. 68° 26′ 45″, at a depth of 1,555 fathoms. (Slightly enlarged.)

308. **Leptophidium marmoratum**, Goode and Bean 348
Drawing by M. M. Hildebrant, from type No. 37237, U. S. N. M., collected by the steamer *Albatross*, at station 2350, in N. lat. 23° 10′ 39″, W. lon. 82° 20′ 21″, at a depth of 213 fathoms. (Slightly reduced.)

PLATE LXXXVIII.

309. **Phycis regius**, (Walbaum), Jordan and Gilbert 357
Drawing by H. L. Todd, from No. 20923, U. S. N. M., obtained in New York City, by E. G. Blackford. (Two-thirds natural size.)

Text page.

310. **Phycis cirratus**, Goode and Bean 358
Drawing by H. L. Todd, from type No. 39059, U. S. N. M., collected by the steamer *Albatross*, at station 2376, in N. lat. 29° 03′ 15″, W. lon. 88° 16′, at a depth of 324 fathoms.

311. **Phycis chuss**, (Walbaum), Gill..... 359
Drawing by H. L. Todd, from No. 28707, U. S. N. M., collected by the steamer *Fish Hawk*, at station 918, in N. lat. 40° 20′ 24″, W. lon. 70° 41′ 30″, at a depth of 245 fathoms.

PLATE LXXXIX.

312. **Phycis tenuis**, (Mitchill), De Kay..... 359
Drawing by H. L. Todd, from No. 21029, U. S. N. M., collected by the steamer *Speedwell*, at stations 73 and 74, in Halifax Harbor.

313. **Phycis Chesteri**, Goode and Bean..... 360
Drawing by H. L. Todd, from No. 21840, U. S. N. M., collected by the steamer *Speedwell*, at station 174, off Capo Ann, in 140 fathoms. (About two-thirds natural size.)

314. **Aprion macrophthalmus**, (Müller), Jordan and Swain..... 239
Drawing by M. M. Smith, from a specimen collected by the steamer *Blake*, at station CCLXI, in N. lat. 23° 13′, W. lon. 89° 10′, at a depth of 84 fathoms.

PLATE XC.

315. **Læmonema barbatula**, Goode and Bean 362
Drawing by W. S. Haines, from No. 38331, U. S. N. M., collected by the steamer *Albatross*, at station 2397, in N. lat. 28° 42′, W. lon. 86° 36′, at a depth of 280 fathoms.

315A. **Læmonema barbatula**, Goode and Bean..... 362
Drawing by H. L. Todd, from No. 29046, U. S. N. M., collected by the steamer *Fish Hawk*, at station 1045, in N. lat. 38° 35′, W. lon. 73° 13′, at a depth of 312 fathoms.

316. **Læmonema melanurum**, Goode and Bean 363
Drawing by W. S. Haines, from type No. 38270, U. S. N. M., collected by the steamer *Albatross* at station 2415, in N. lat. 30° 44′, W. lon. 79° 26′, at a depth of 440 fathoms.

317. **Molva vulgaris**, Fleming..... 364
Outline from Day, Fishes of Great Britain and Ireland, Pl. LXXXVI.

PLATE XCI.

318. **Physiculus Kaupi**, Poey..... 366
Outline from Günther, Challenger Report, Vol. XXII, Pl. XVII.

319. **Physiculus fulvus**, Bean..... 366
Drawing by H. L. Todd, from type No. 28766, U. S. N. M., collected by the steamer *Fish Hawk*, at station 941, in N. lat. 40° 01′, W. lon. 69° 56′, at a depth of 59 fathoms.

320. **Uraleptus Maraldi** (Risso), Costa..... 367
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station LXXXI, off Neris. (Nearly twice natural size.)

PLATE XCII.

321. **Lotella maxillaris**, Bean..... 368
Drawing by H. L. Todd, from type No. 29832, U. S. N. M., collected by the steamer *Fish Hawk*, at station 952, in N. lat. 39° 55′, W. lon. 70° 28′, at a depth of 396 fathoms. (Nearly three times natural size.)

322. **Mora mediterranea**, Risso..... 369
Outline from Bonaparte, Fauna Italica, Vol. III, Pl. 107.

323. **Lepidion Rissoi**, Swainson..... 370
Outline from Vinciguerra, Ann. Mus. Civ. Genoa, Vol. XVIII, Pl. III.

PLATE XCIII.

324. **Antimora viola** (Goode and Bean), Jordan..... 372
Drawing by H. L. Todd, from type No. 21837, U. S. N. M., collected by Capt. Joseph W. Collins, of the schooner *Marion*, on the edge of Le Have Bank. (Three-eighths natural size.)

Text page.

325. **Halargyreus brevipes**, Vaillant 375
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXV. (About one-third natural size.)

326. **Strinsia tinca**, Rafinesque 380
Outline from Bonaparte, Fauna Italica, Vol. III, Pl. 107.

PLATE XCIV.

327. **Onos ensis**, (Reinhardt), Gill 381
Drawing by S. F. Denton, from No. 39321, U. S. N. M., collected by the steamer *Albatross*, at station 2550, in N. lat. 39° 44′ 30″, W. lon. 70° 30′ 45″, at a depth of 1,081 fathoms.

328. **Rhinonemus cimbrius**, (Linnæus), Goode and Bean 384
Drawing by H. L. Todd, from No. 2,721 U. S. N. M., collected in Chaleur Bay, by Edward Brown. (About three times natural size.)

329. **Brosmius brosme**, (Müller), Günther 385
Drawing by H. L. Todd, from No. 29967, U. S. N. M., obtained in a Boston market, by W. A. Wilcox.

PLATE XCV.

330. **Merlucius bilinearis**, (Mitchill), Gill 386
Drawing by H. L. Todd, from No. 21016, U. S. N. M., obtained by the U. S. Fish Commission in a Halifax market.

331. **Bregmaceros atlanticus**, Goode and Bean 388
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station CXIII, off Neris, in 305 fathoms. (Three and a half times natural size.)

332, 333. **Cœlorhynchus occa**, Goode and Bean 400
Drawing by H. L. Todd, from type No. 37331 U. S. N. M., collected by the steamer *Albatross*, at station 2396, in N. lat. 28° 34′, W. lon. 86° 48′, at a depth of 335 fathoms. (One-half natural size.)

PLATE XCVI.

334. **Macrurus berglax**, Lacépède 391
Drawing by H. L. Todd, from No. 15608, U. S. N. M. (Gloucester donation 490), collected on the eastern part of Banquereux, at a depth of 200 fathoms, by Capt. David Campbell and crew of the schooner *Admiral*. (One-fourth natural size.)

335. **Macrurus Bairdii**, Goode and Bean 393
Drawing by H. L. Todd, from No. 21014, U. S. N. M., taken 40 miles east of Thatcher's Island, at a depth of 160 fathoms. (About two-thirds natural size.)

336. **Cælorhynchus carminatus**, Goode 398
Drawing by H. L. Todd, from No. 26187, U. S. N. M., collected by the steamer *Fish Hawk*, at station 893, off Marthas Vineyard, in 372 fathoms. (Seven-twelfths natural size.)

337. **Cœlorhynchus occa**, Goode and Bean 400
Drawing by H. L. Todd, from type No. 37331, U. S. N. M., collected by the steamer *Albatross*, at station 2396, in N. lat. 28° 34′, W. lon. 86° 48′, at a depth of 335 fathoms. (Seven-twelfths natural size.)

PLATE XCVII.

338. **Cœlorhynchus caribbæus**, Goode and Bean 401
Drawing by H. L. Todd, from type No. 37333, U. S. N. M, collected by the steamer *Albatross*, at station 2377, in the northern part of the Gulf of Mexico, in N. lat. 29° 07′ 30″, W. lon. 88° 08′, at a depth of 210 fathoms. (About two-thirds natural size.)

339. **Coryphænoides carapinus**, Goode and Bean 404
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station CCXLII, in N. lat. 39° 43′, W. lon. 70° 55′ 25″, at a depth of 1,002 fathoms.

340. **Hymenocephalus Goodei**, (Günther), Bean 407
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station 56, in N. lat. 23° 09′, W. lon. 82° 21′ 30″, at a depth of 175 fathoms. (Four-fifths natural size.)

341. **Hymenocephalus cavernosus**, Goode and Bean 408
Drawing by S. F. Denton, from type No. 37337, U. S. N. M., collected by the steamer *Albatross*, at station 2398, in N. lat. 28° 45′, W. lon. 86° 26′, at a depth of 227 fathoms. (Slightly enlarged.)

PLATE XCVIII.

Text page.

342. **Lionurus filicauda**, Günther 409
Outline from Günther, Challenger Report, Vol. XXII, Pl. XXXIV.

343. **Trachonurus sulcatus**, Goode and Bean 410
Drawing by A. H. Baldwin, from typo No. 37335, U. S. N. M., collected by the steamer *Albatross*, at station 2394, in N. lat. 28° 38′ 30″, W. lon. 87° 02′, at a depth of 420 fathoms. (Slightly enlarged.)

344. **Cetonurus globiceps**, Vaillant 411
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XX, Fig. 1.

345. **Chalinuras imula**, Goode and Bean 412
Drawing by H. L. Todd, from No. 39152 U. S. N. M., collected by the steamer *Albatross*, at station 2095, in N. lat. 39° 29′, W. lon. 70° 58′ 40″, at a depth of 1,342 fathoms.

PLATE XCIX.

345A. **Chalinura mediterranea**, Giglioli 525
Outline by Prof. H. H. Giglioli, from a specimen in the Central Collection of Italian Vertebrata, Royal Zoölogical Museum, Florence, Italy. (Slightly reduced.)

346. **Nematonurus gigas**, (Vaillant), Goode and Bean 416
Outline from Günther, Challenger Report, Vol. XXII, Pl. LX.

347. **Moseleya longifilis**, (Günther), Goode and Bean 417
Outline from Günther, Challenger Report, Vol. XXII, Pl. XXXV.

PLATE C.

348. **Abyssicola macrochira**, (Günther), Goode and Bean 417
Outline from Günther, Challenger Report, Vol. XXII, Pl. XXIX, Fig. B.

349. **Trachyrhynchus scabrus**, (Rafinesque), Goode and Bean 417
Outline from Günther, Challenger Report, Vol. XXII, Pl. XLI, Fig. C.

349A. **Macrurus longifilis**, Günther 417
Outline from Günther, Challenger Report, Vol. XXII, Pl. XXXV.

PLATE CI.

350. **Macrurus Novæ-zelandiae**, (Hector), Günther 418
Outline from Hector. Transactions of the New Zealand Institute, Vol. III, Pl. XVIII.

351. **Steindachneria argentea**, Goode and Bean 419
Drawing by H. L. Todd, from type No. 37350, U. S. N. M., collected by the steamer *Albatross*, at station 2378, in N. lat. 39° 14′ 30″, W. lon. 88° 09′ 30″, at a depth of 68 fathoms. (About four-fifths natural size.)

352. **Bathygadus favosus**, Goode and Bean 420
Drawing by H. L. Todd, from the type specimen collected by the steamer *Blake*, at station LXXX, off Martinique, in 472 fathoms. (About one-half natural size.)

353, 354. **Cœlorhynchus carminatus**, Goode 398
Drawings by H. L. Todd, from No. 26187, U. S. N. M., collected by the steamer *Fish Hawk*, at station 893, off Marthas Vineyard, in 372 fathoms. (Natural size.)

PLATE CII.

355A, B. **Limanda Beanii**, Goode 428
Drawings by H. L. Todd, from No. 26102, U. S. N. M., collected by the the steamer *Fish Hawk*, at stations 875, 876, off Marthas Vineyard, in 120 to 126 fathoms. (About four-fifths natural size.)

355C, D. **Limanda Beanii**, Goode 428
Drawings by H. L. Todd, from a specimen collected by the steamer *Albatross*, at station 2401, in N. lat. 28° 38′ 30″, W. lon. 85° 52′ 30″, at a depth of 142 fathoms. (Enlarged about one-half.)

356A. **Glyptocephalus cynoglossus**, (Linnæus), Gill 430
Drawing by S. F. Denton, from No. 39487, U. S. N. M., collected by the steamer *Albatross*, at station 2552, in N. lat. 39° 47′ 07″, W. lon. 70° 35′, at a depth of 721 fathoms. (Natural size.)

356B. **Glyptocephalus cynoglossus**, (Linnæus), Gill 430
Drawing by S. F. Denton, from a specimen collected by the steamer *Albatross*, at station 2543, in N. lat. 39° 58′ 15″, W. lon. 70° 42′ 30″, at a depth of 166 fathoms. (Natural size.)

PLATE CIII.

Text page.

357A, B. **Monolene sessilicauda**, Goode 452
Drawings by H. L. Todd, from No. 26120, U. S. N. M., collected by the steamer *Fish Hawk*, off Newport, R. I. (About five-sevenths natural size.)

358. **Monolene atrimana**, Goode and Bean 455
Drawing by H. L. Todd, from the type specimen collected by the steamer *Blake*, at station XVI, off Barbados, in 288 fathoms. (About four-fifths natural size.)

359. **Monolene atrimana**, Goode and Bean 455
Drawing by H. L. Todd, from No. 26005, U. S. N. M., collected by the steamer *Fish Hawk*, at stations 871 and 872, off Marthas Vineyard, in 86 to 115 fathoms. (Natural size.)

PLATE CIV.

360. **Etropus rimosus**, Goode and Bean 450
Drawing by H. L. Todd, from type No. 37332, U. S. N. M., collected by the steamer *Albatross*, at station 2108, in N. lat. 28° 28′, W. lon. 84° 25′, at a depth of 21 fathoms. (Enlarged about one-half.)

361. **Etropus rimosus**, Goode and Bean 450
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross* at station 2543, upon the surface, in N. lat. 39° 58′ 15″, W. lon. 70° 42′ 30″, at a depth of 166 fathoms. (Three times natural size.)

362. **Notosema dilecta**, Goode and Bean 437
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross*, at the surface, at Station 2601, in N. lat. 31° 39′ 15″, W. lon. 75° 33′ 30′, at a depth of 107 fathoms. (Twice natural size.)

PLATE CV.

363. **Hippoglossus vulgaris**, Fleming 434
Drawing by H. L. Todd, from No. 10139, U. S. N. M., collected by the U. F. Fish Commission, at Eastport, Me.

364. **Platysomatichthys hippoglossoides**, (Walbaum), Goode and Bean 435
Drawing by H. L. Todd, from a specimen obtained in Fulton Market, New York City.

PLATE CVI.

365A, B. **Notosema dilecta**, Goode and Bean 437
Drawings by H. L. Todd, from a specimen collected by the steamer *Blake*, at station CCCXIII, off Charleston, S. C., in N. lat. 32° 31′ 50″, W. lon. 78° 45′, at a depth of 75 fathoms. (Slightly reduced.)

366A, B. **Citharichthys arctifrons**, Goode 442
Drawings by H. L. Todd, from a specimen collected by the steamer *Fish Hawk*, off Newport, R. I., in 115 to 155 fathoms. (Slightly enlarged.)

PLATE CVII.

367. **Hippoglossoides platessoides**, (Fabricius), Gill 438
Drawing by H. L. Todd, from No. 21002, U. S. N. M., collected by the U. S. Fish Commission, on Le Have Bank.

368. **Cyclopsetta fimbriata**, Goode and Bean 451
Drawing by H. L. Todd, from type No. 37330, U. S. N. M., collected by the steamer *Albatross*, at Station 2403, in N. lat. 28° 42′ 30″, W. lon. 85° 29′, at a depth of 88 fathoms. (Seven-tenths natural size.)

PLATE CVIII.

369A B. **Citharichthys unicornis**, Goode 444
Drawings by H. L. Todd, from type No. 26003, U. S. N. M., collected by the steamer *Fish Hawk*, at stations 870, 871, off Marthas Vineyard, in 115 to 155 fathoms. (Enlarged about one-half.)

370. **Citharichthys spilopterus**, Günther 447
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, at station CCXLIV, in N. lat. 23° 13′, W. lon. 89° 10′, at a depth of 84 fathoms. (Slightly reduced.)

371. **Scianectes macrophthalmus**, Alcock 140
Copied from Alcock, Journal of the Asiatic Society of Bengal, Vol. LVIII, Pt. 2, Pl. XVI, Fig. 1.

PLATE CIX.

Text page.

372. **Trichopsetta ventralis**, (Goode and Bean), Gill 440
Drawing by H. L. Todd, from No. 37372, U. S. N. M., collected by the steamer *Albatross*, at station 2378, in N. lat. 29° 13′ 30″, W. lon. 88° 09, 30″, at depth of 68 fathoms. (Slightly enlarged.)

373. **Citharichthys pætulus**, (Goode and Bean), Jordan and Gilbert 448
Drawing by H. L. Todd, from type No. 30180, U. S. N. M., collected by Silas Stearns, at Pensacola, Fla. (About one-half natural size.)

PLATE CX.

374. **Aphoristia fasciata**, Goode and Bean 458
Drawing by H. L. Todd, from No. 37348, U. S. N. M., collected by the steamer *Albatross*, at Jamaica, West Indies.

375. **Aphoristia nebulosa**, Goode and Bean 458
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Blake*, at station CCCXQI, in N. lat. 32° 07′, W. lon. 78° 37′ 30″, at a depth of 229 fathoms.

376. **Aphoristia marginata**, Goode and Bean 459
Drawing by H. L. Todd, from a specimen collected by the steamer *Albatross*, at station 2376, in N. lat. 29° 03′ 15″, W. lon. 88° 16′, at a depth of 324 fathoms. (Slightly enlarged.)

377. **Aphoristia pigra**, Goode and Bean 460
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Blake*, at station XXIII, off St. Kitt's, West Indies, in 250 fathoms.

378. **Aphoristia diomediana**, Goode and Bean 460
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Albatross*, at station 2414, in N. lat. 25° 04′ 30″, W. lon. 82° 59′ 15″, at a depth of 26 fathoms. (About two-thirds natural size.)

379. **Aphoristia pusilla**, Goode and Bean 461
Drawing by H. L. Todd, from No. 28778, U. S. N. M., collected by the steamer *Fish Hawk*, in N. lat. 40° 01′, W. lon. 69° 56′, off Marthas Vineyard, in 179 fathoms. (About seven-tenths natural size.)

PLATE CXI.

380. **Prionotus militaris**, Goode and Bean 464
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Albatross*, at station 2362, off Cape Catoche, Yucatan, in N. lat. 22° 08′ 30″, W. lon. 86° 53′ 30″, at a depth of 25 fathoms.

381. **Prionotus egretta**, Goode and Bean 465
Drawing by M. M. Smith, from a specimen collected by the steamer *Blake*, at station LXIV, off Barbadoes, in 100 to 200 fathoms.

382. **Prionotus alatus**, Goode and Bean 467
Drawing by H. L. Todd, from a specimen collected by the steamer *Blake*, off Charleston, S. C., in N. lat. 32° 31′ 50″, W. lon. 78° 45′, at a depth of 75 fathoms.

PLATE CXII.

383, 383B. **Prionotus trinitatis**, Goode and Bean 468
Drawings by H. L. Todd, from type No. 39318, U. S. N. M., collected by the steamer *Albatross*, at station 2120, off Trinidad, in N. lat. 11° 07′, W. lon. 62° 11′ 30″, at a depth of 73 fathoms.

384. **Prionotus militaris**, Goode and Bean 464
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Albatross*, at Station 2362, off Cape Catoche, Yucatan, in N. lat. 22, ° 08′ 30″, W. lon. 86° 53′ 30″, at a depth of 25 fathoms.

PLATE CXIII.

385, 385A, B. **Peristedion miniatum**, Goode 470
Drawings by H. L. Todd, from type No. 26023, U. S. N. M., collected by the steamer *Fish Hawk*, at station 869, in N. lat. 40° 02′ 18″, W. lon. 70° 23′ 06″, at a depth of 192 fathoms. (No. 385 reduced about one-half; Nos. 385A, B natural size.)

PLATE CXIV.

Text page.

386. **Peristedion longispatha**, Goode and Bean 472
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Blake*, at station LVIII., off Havana, in 242 fathoms. (About seven-ninths natural size.)

387. **Peristedion gracile**, Goode and Bean 473
Drawing by H. L. Todd, from the type specimen, collected by the steamer *Albatross*, at station 2401, in N. lat. 28° 38′ 30″, W. lon. 85° 52′ 30″, at a depth of 142 fathoms.

388A, B. **Peristedion platycephalum**, Goode and Bean 471
Drawings by H. L. Todd, from the type specimen, collected by the steamer *Blake*, at station LX, off Barbados, in 123 fathoms. (Natural size.)

PLATE CXV.

389. **Lophotes Cepedianus**, Giorna 349
Drawing from Temminck and Schlegel, Fauna Japonica, Pl. LXXI, Fig. 2.

390. **Lophotes Capellei**, Temminck and Schlegel 351
Outline from Temminck and Schlegel, Fauna Japonica, Pl. LXXI.

391. **Trachypterus iris**, (Gmelin), Cuvier and Valenciennes 477
Outline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Pl. 297.

PLATE CXVI.

392. **Trachypterus arcticus**, (Brünnich), Nilsson 479
Outline from Day, Fishes of Great Britain and Ireland, Vol. I, Pl. LXIII.

393. **Stylephorus chordatus**, Shaw 482
Outline from Blainville, Journal de Physique, Vol. LXXXVII, Pl. I.

394. **Stylephorus chordatus**, Shaw 482
Outline from Shaw, Transactions of the Linnæan Society of London, Vol. I. p. 90.

PLATE CXVII.

395. **Regalecus glesne**, Ascanius 480
Outline from Day, Fishes of Great Britain and Ireland, Pl. 61.

396. **Macrorhamphosus scolopax**, (Linnæus), Goode and Bean 483
Drawing by H. L. Todd, from No. 28755, U. S. N. M., collected by the steamer *Fish Hawk*, at station 940, in N. lat. 39° 54′, W. lon. 69° 51′ 30″, at a depth of 130 fathoms. (Enlarged one-fourth.)

397. **Aulostoma longipes**, Vaillant 484
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVII, Fig. 4. (Eight times natural size.)

398. **Chaunax pictus**, Lowe 487
Drawing by H. L. Todd, from No. 26021, U. S. N. M., collected by the steamer *Fish Hawk*, at station 869, off Martha's Vineyard, in 192 fathoms. (Four times natural size.)

399. **Ceratias Holbölli**, Krøyer 489
Drawing from Gaimard, Voy. Skand., Poissons, Pl. IX.

PLATE CXVIII.

400, 400A, B. **Lophius piscatorius**, Linnæus 485
Drawings by S. F. Denton, from No. 39314, U. S. N. M., collected by the U. S. Fish Commission, 20 miles south of No Man's Land.

PLATE CXIX.

401. **Mancalias Shufeldtii**, Gill 490
Drawing by H. L. Todd, from No. 33552, U. S. N. M., collected by the steamer *Albatross*, at station 2099, in N. lat. 37° 12′ 20″, W. lon. 69° 39′, at a depth of 2,949 fathoms. (About two and a half times natural size.)

402. **Cryptopsaras Couesii**, Gill 491
Drawing by H. L. Todd, from No. 33558, U. S. N. M., collected by the steamer *Albatross*, at station 2101, in N. lat. 38° 13′ 30″, W. lon. 68° 24′, at a depth of 1,686 fathoms. (Three and three-fourths times natural size.)

Text page.

403. **Halieutæa stellata**, Cuvier and Valenciennes 499
Outline from Temminck and Schlegel, Fauna Japonica, Pl. 82.

404. **Paroneirodes glomerosus**, Alcock 493
Drawing from Alcock, Annals and Magazine of Natural History, Vol. II, Pl. IX, Fig. 6. (Very slightly reduced.)

PLATE CXX.

405. **Corynolophus Reinhardtii**, (Lütken), Gill 494
Drawing from Lütken, Vidensk. Selsk. Skr. Naturvid. og Math. Afh., IV, Pl. 331.

406. **Melanocetus Johnsonii**, Günther 494
Drawing by H. L. Todd, from No. 38055, U. S. N. M., collected by the steamer *Albatross*, at station 2149, in N. lat. 13° 01′ 30″, W. lon. 81° 25′, at a depth of 992 fathoms.

407. **Liocetus Murrayi**, Günther 495
Drawing from Günther, Challenger Report, Vol. XXII, Pl. XI.

PLATE CXXI.

408. **Linophryne lucifer**, Collett 496
Drawing from Collett, Proceedings of the Zoölogical Society of London, 1886, Pl. XV.

409. **Caulophryne setosus**, Goode and Bean 496
Drawing by S. F. Denton, from type No. 39265, U. S. N. M., collected by the steamer *Albatross*, in N. lat. 39° 27′, W. lon. 71° 15′, at a depth of 1,276 fathoms. (Nearly three times natural size.)

410. **Halieutæa coccinea**, Alcock 500
Drawing from Alcock, Annals and Magazine of Natural History, Series 6, Vol. VIII, Pl. VIII.

411. **Malthopsis luteus**, Alcock 529
Drawing from Alcock, Annals and Magazine of Natural History, Series 6, Vol. VIII, Pl. VIII.

PLATE CXXII.

112A, B. **Halieutella lappa**, Goode and Bean 500
Drawings by H. L. Todd, from No. 31862, U. S. N. M., collected by the steamer *Fish Hawk*, at station 1151, in N. lat. 39° 58′ 30″, W. lon. 70° 37′, at a depth of 125 fathoms.

413. **Dibranchus atlanticus**, Peters 501
Drawings by H. L. Todd, from No. 26088, U. S. N. M., collected by the steamer *Fish Hawk*, at station 879, off Marthas Vineyard, in 225 fathoms. (No. 413A, natural size; No. 413B, enlarged one-third.)

414A, B. **Halieutichthys aculeatus**, (Mitchill), Goode 504
Drawings by H. L. Todd, from No. 23552, U. S. N. M., collected at Key West, Fla., by J. W. Nelie. (Natural size.)

PLATE CXXIII.

415. **Bathyclupea argentea**, Goode and Bean 190
Drawing by A. H. Baldwin, from a specimen collected by the steamer *Blake*, at station XXXVII, off Neris, in 365 fathoms. (About one-half natural size.)

416. **Schedophilopsis spinosus**, Steindachner 216
Drawing by A. H. Baldwin, from a specimen obtained at Astoria, Oregon, by Dr. Aug. C. Kinney. (Four-fifths natural size.)

117. **Tetragonurus Cuvieri**, Risso 230
Drawing by M. M. Hildebrant, from No. 44436, U. S. N. M., collected at Woods Holl, Mass., by Vinal N. Edwards. (About two and a half times natural size.)

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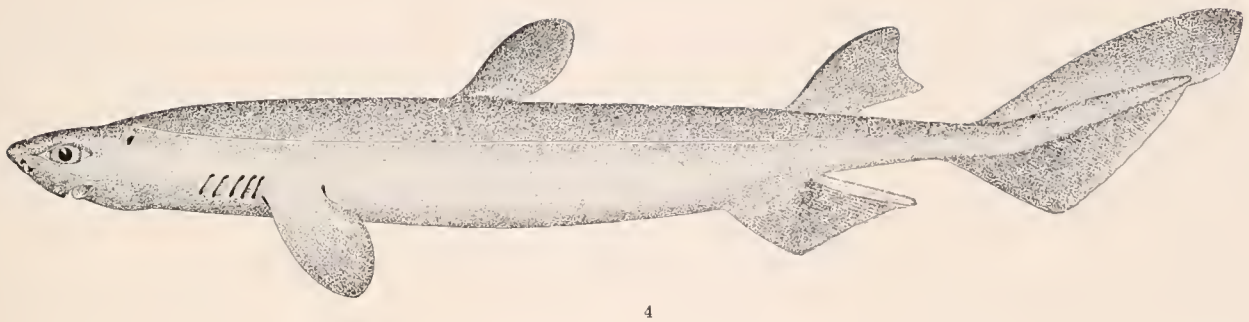
1. Myxine glutinosa. (p. 2.) 2. Myxine australis. (p. 3.) 3. Petromyzon marinus. (p. 4.)



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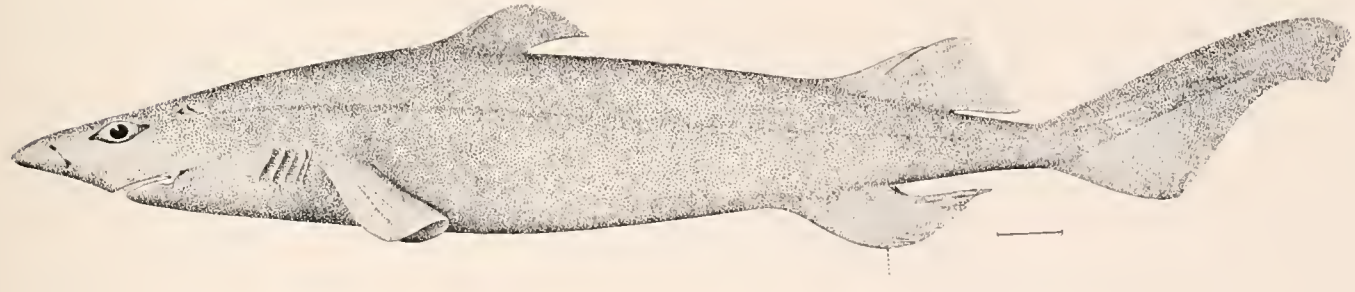

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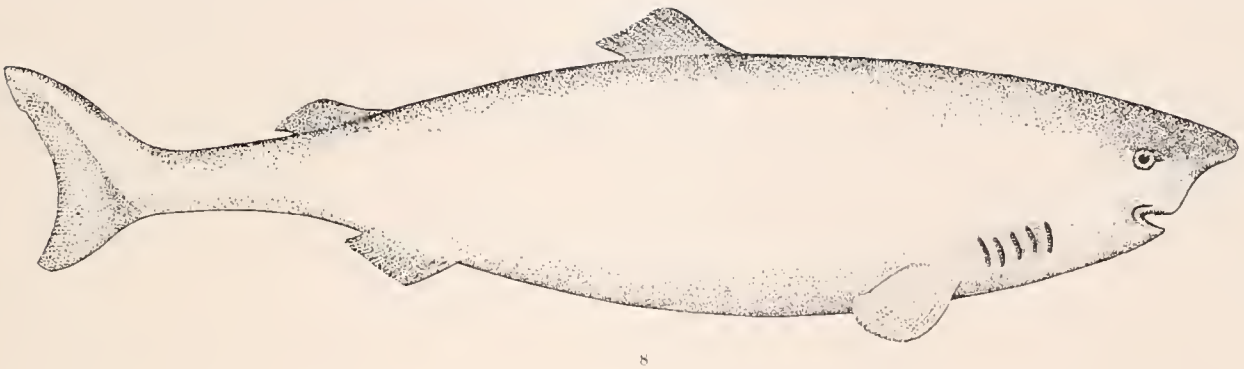
1. Scymnorhinus licha. (p. 7.)
6. Scyliorhinus retifer. (p. 16.)

5. Etmopterus pusillus. (p. 10.)
7. Centroscyllium Fabricii. (p. 11.)



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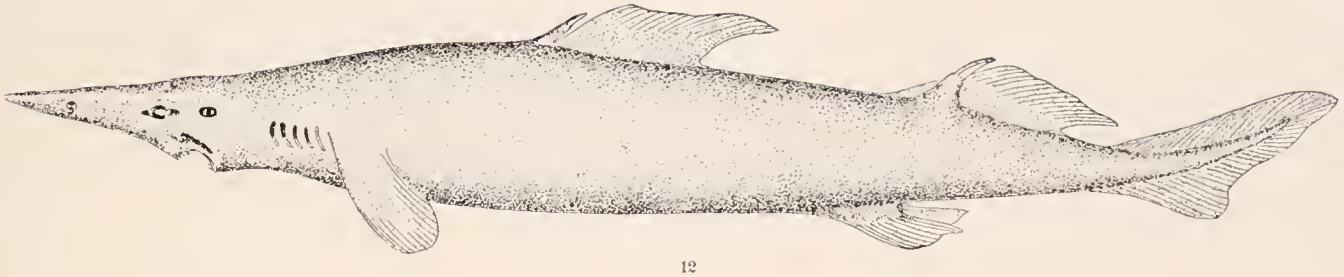
8. Somniosus microcephalus. (p. 7.)
10. Pristiurus melastomus. (p. 20.)

9. Echinorhinus spinosus. (p. 8.)
11. Centrophorus granulosus. (p. 12.)



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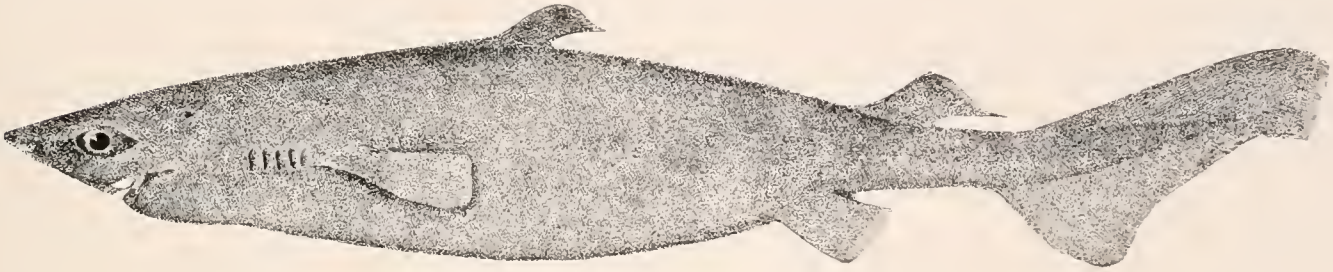

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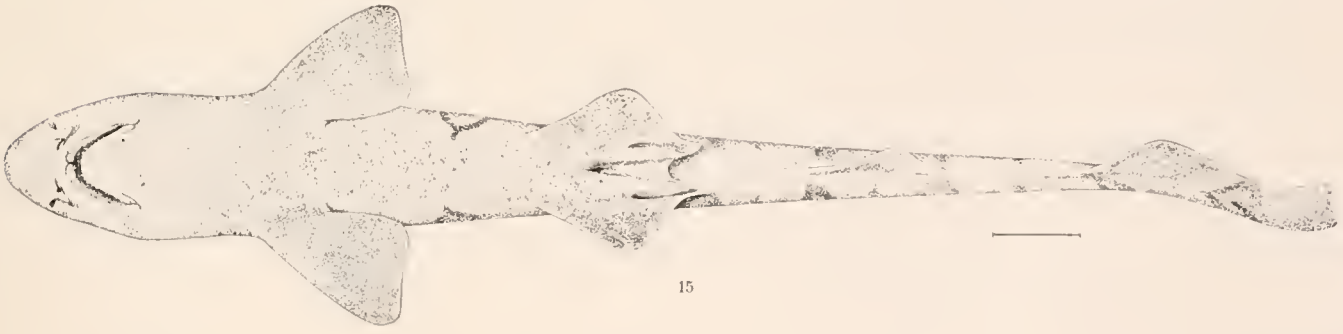

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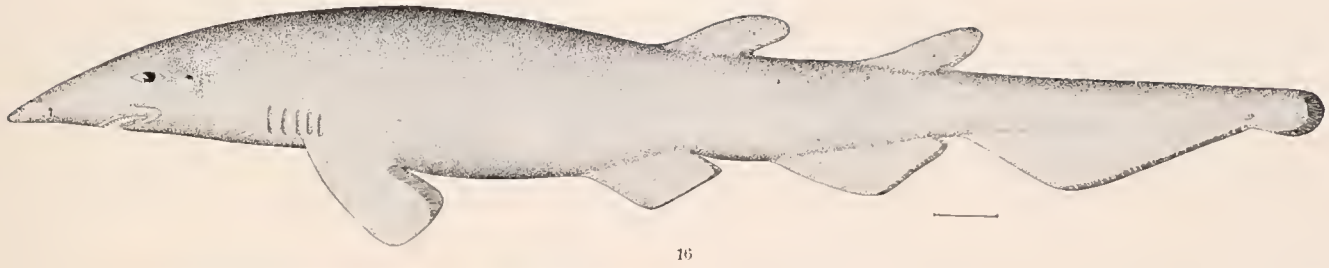
12. Scymnodon ringens. (p. 11.) 13. Centroscymnus coelolepis. (p. 14.) 14, 15. Scyliorhinus retifer. (p. 14.)



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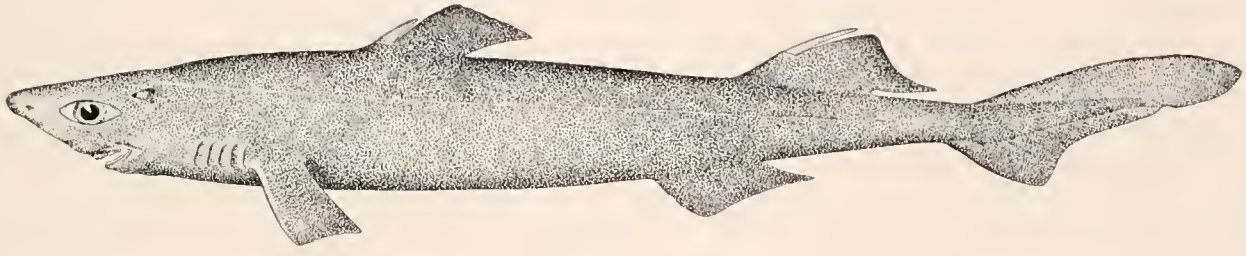

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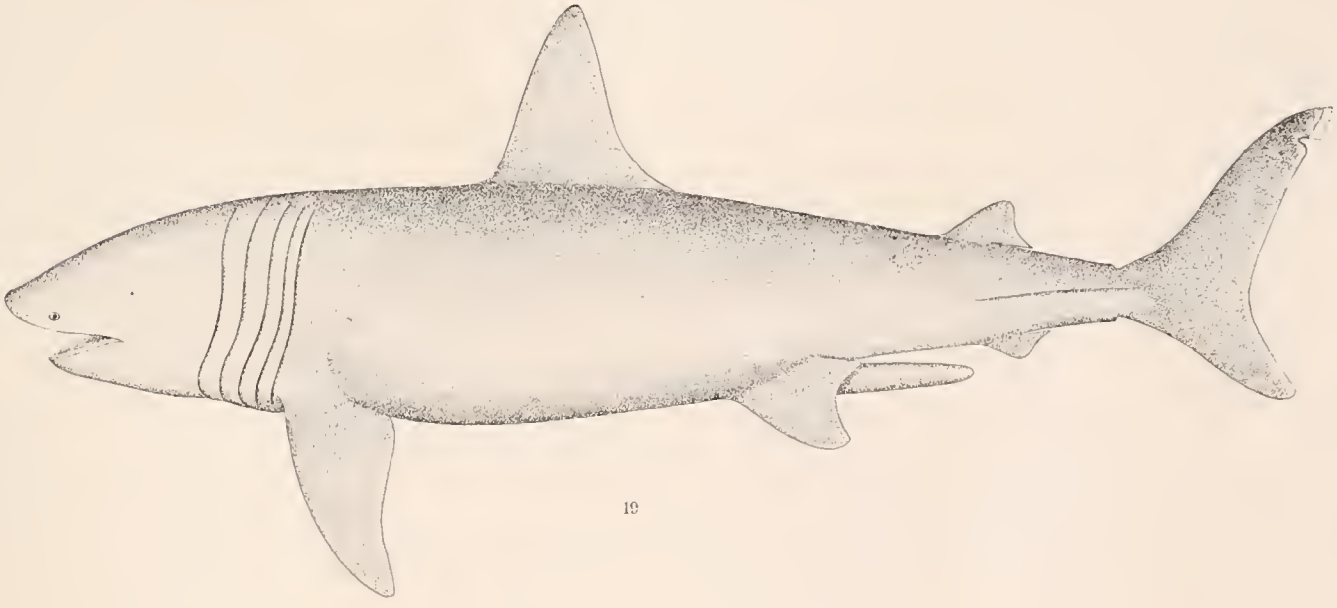

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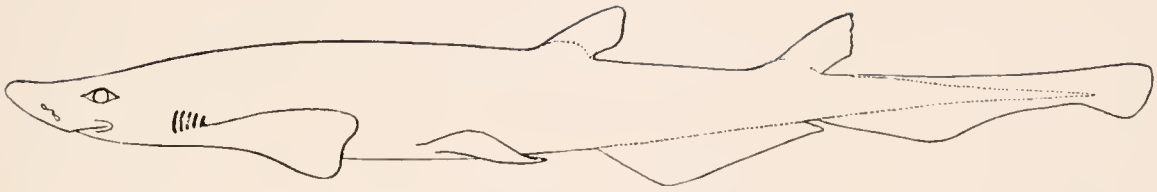
16. Scyliorhinus profundorum. (p. 17.)
17. Pseudotriacis microdon. (p. 18.)
18. Spinax niger. (p. 10.)
19. Cetorhinus maximus. (p. 21.)



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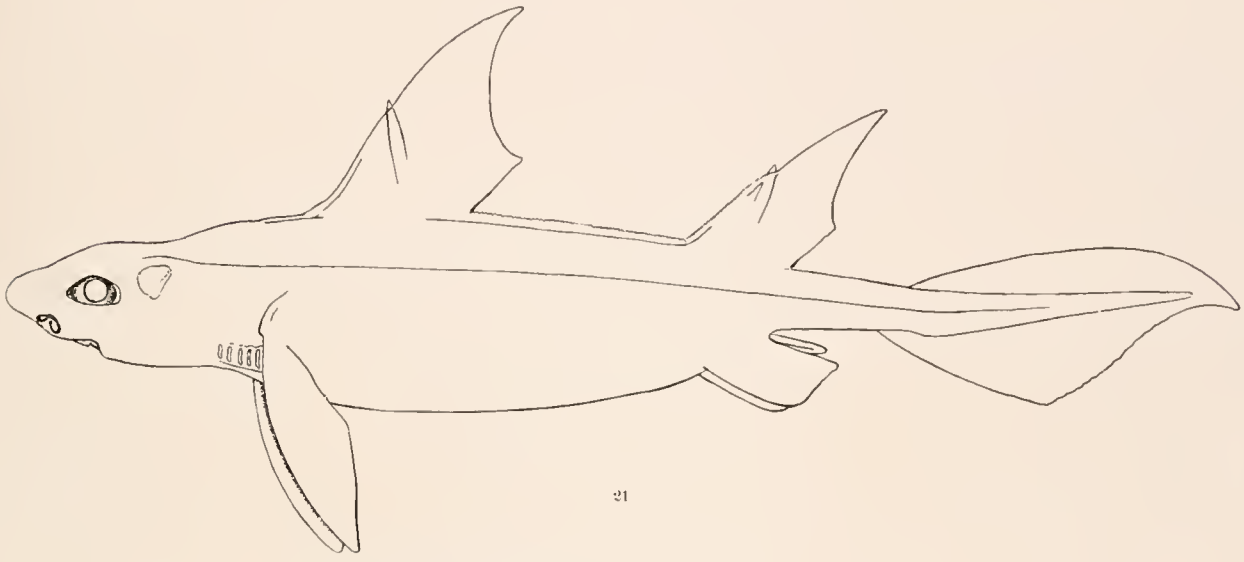

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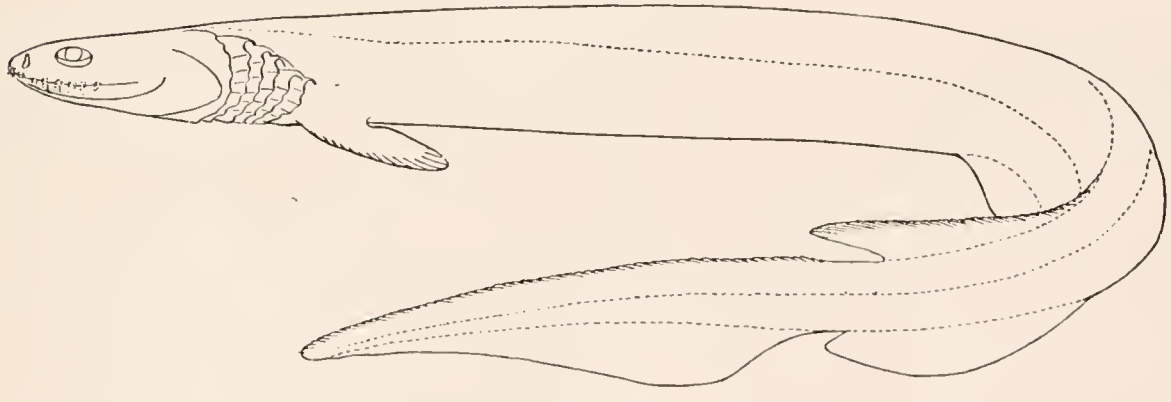

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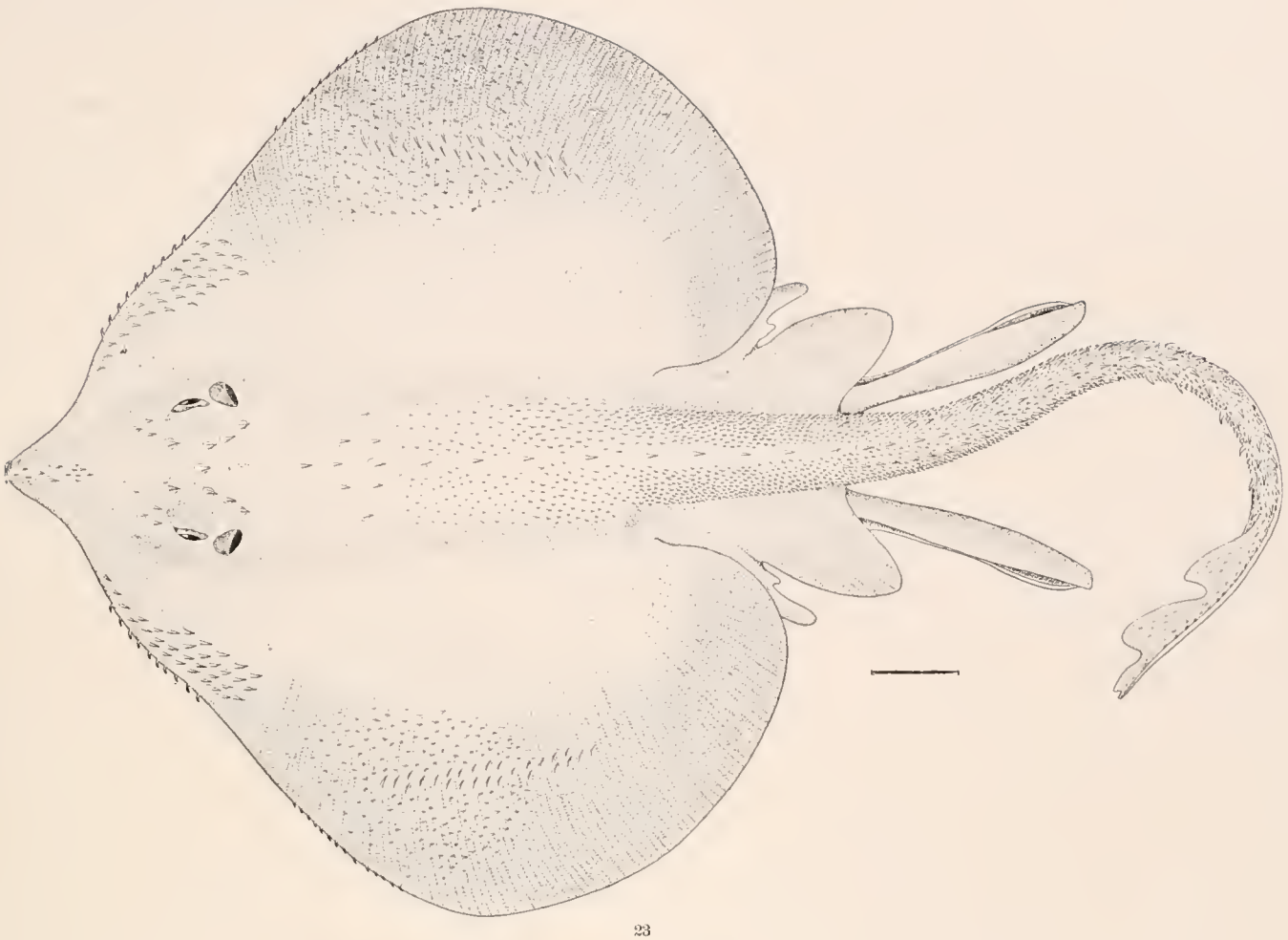
20. Pristiurus atlanticus. (p. 21.) 21. Oxynotus centrina. (p. 15.) 22. Chlamydoselachus anguineus. (p. 22.)



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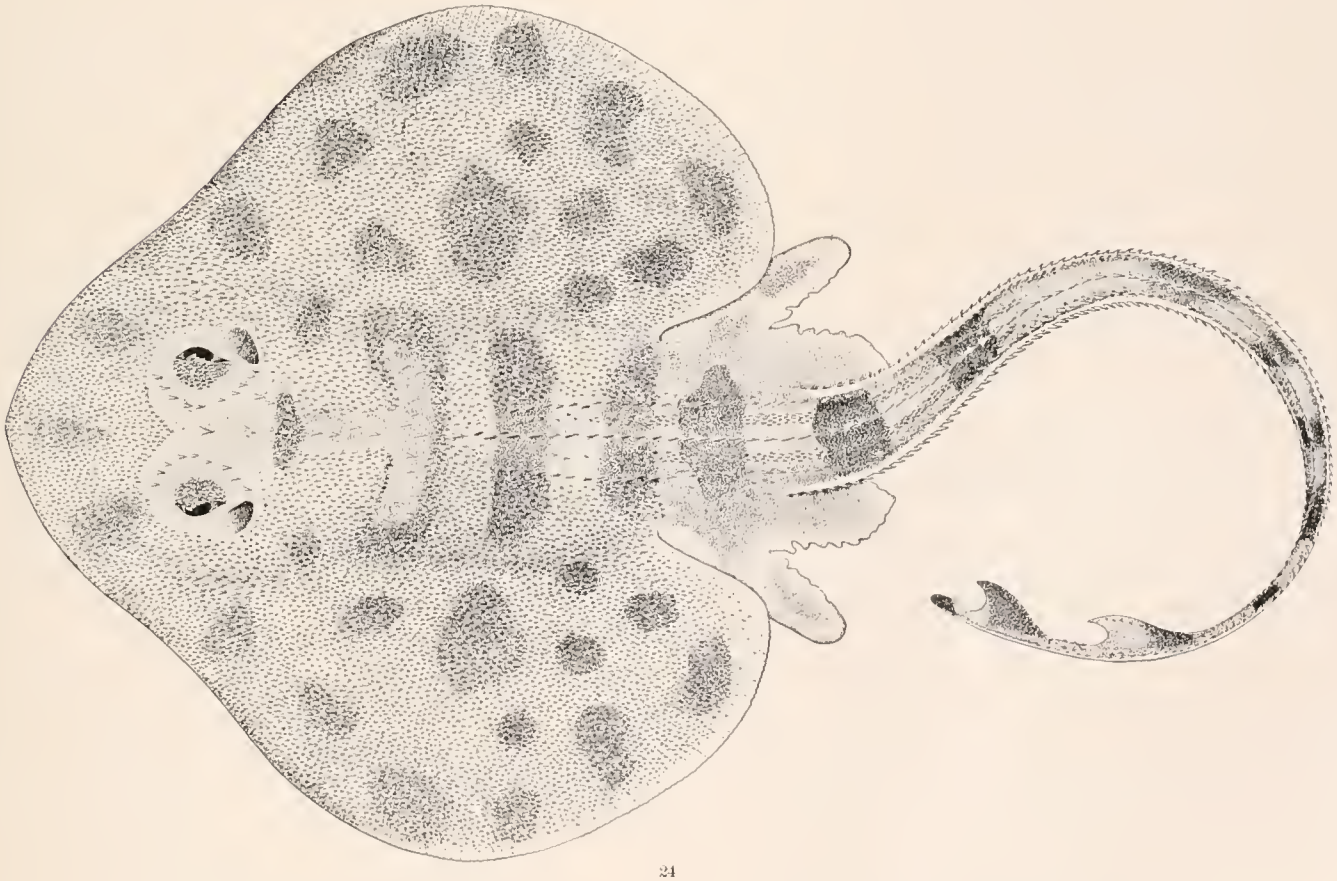

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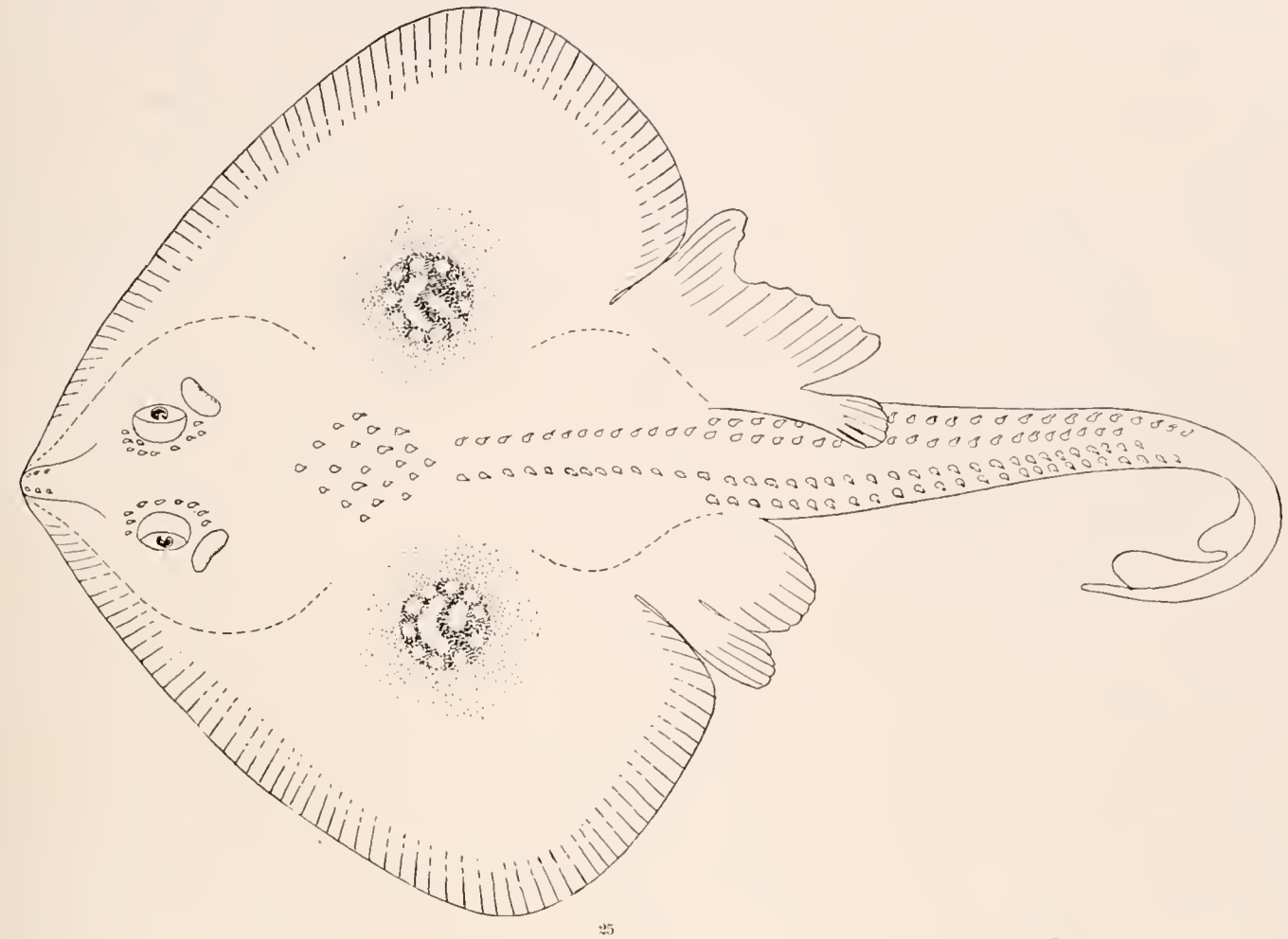
23. Raia Ackleyi. (p. 25.)

24. Raia Ackleyi ornata. (p. 26.)



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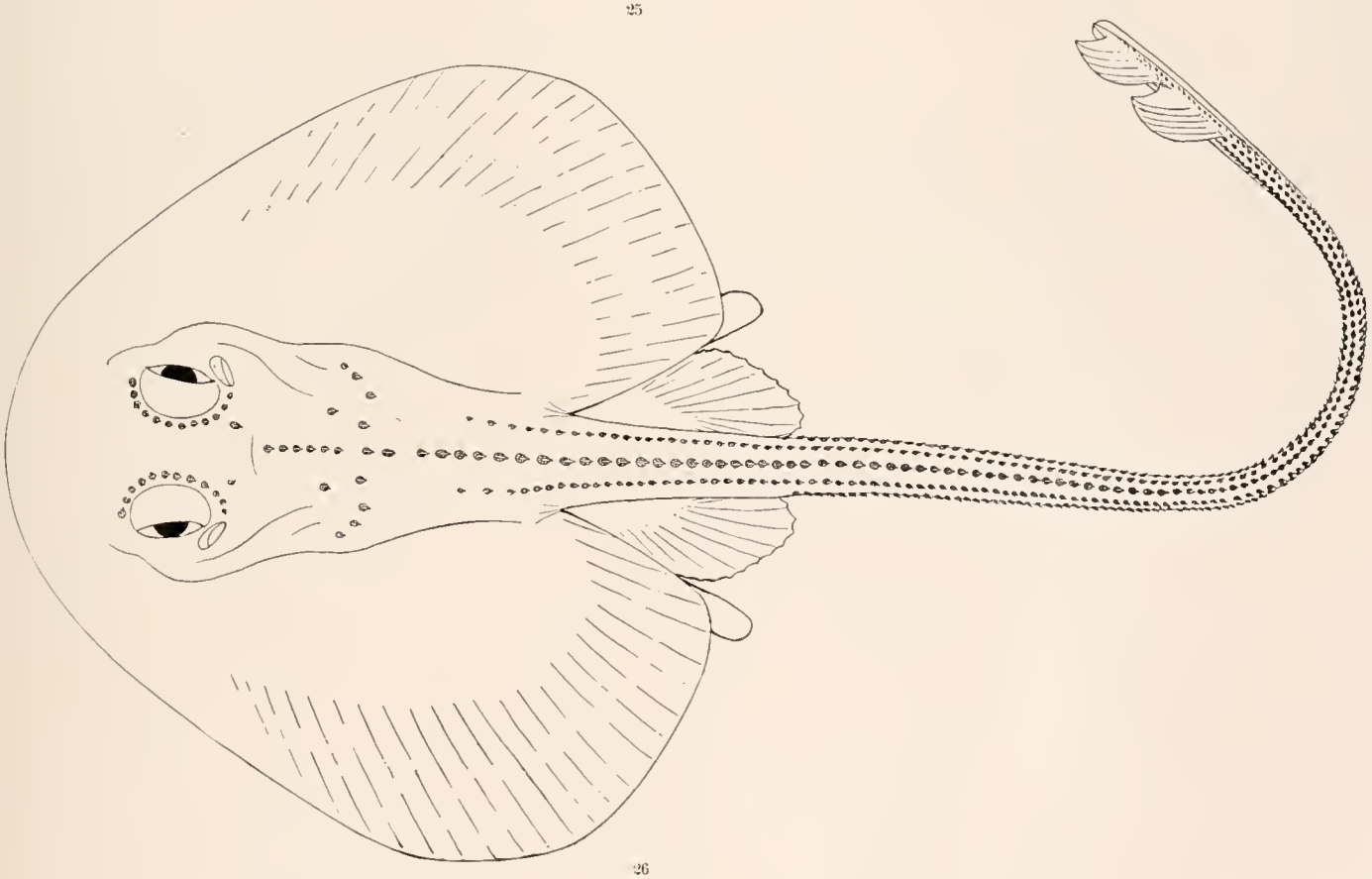

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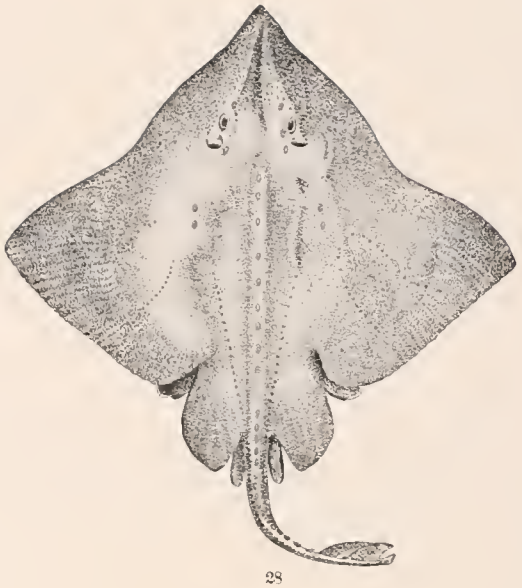
25. Raia circularis. (p. 27.)

26. Raia plutonia. (p. 27.)

27



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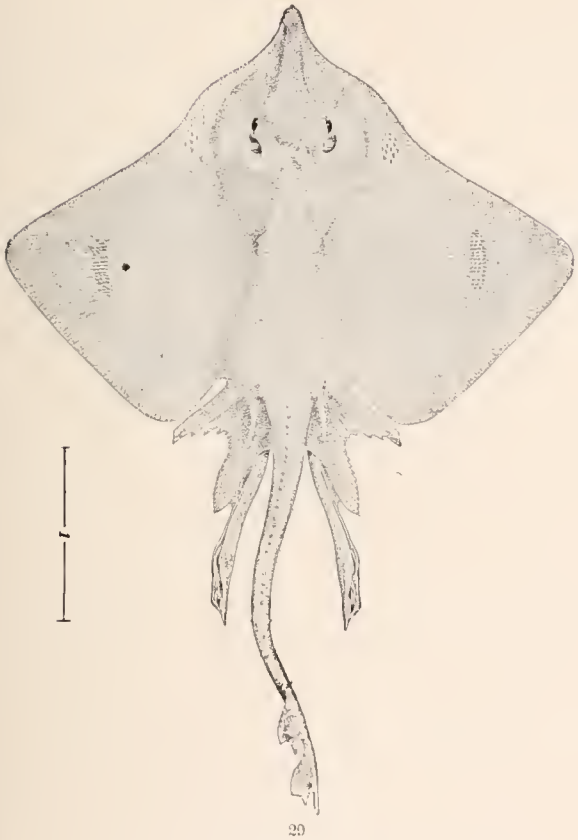

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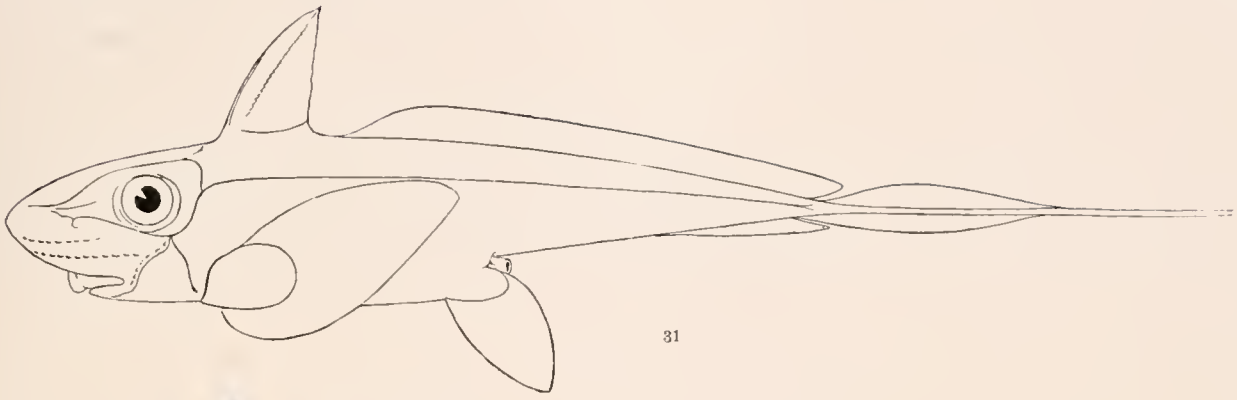
27. Raia radiata. (p. 25.)
29. Raia levis. (p. 28.)

28. Raia hyperborea. (p. 28.)
30. Raia granulata. (p. 29.)



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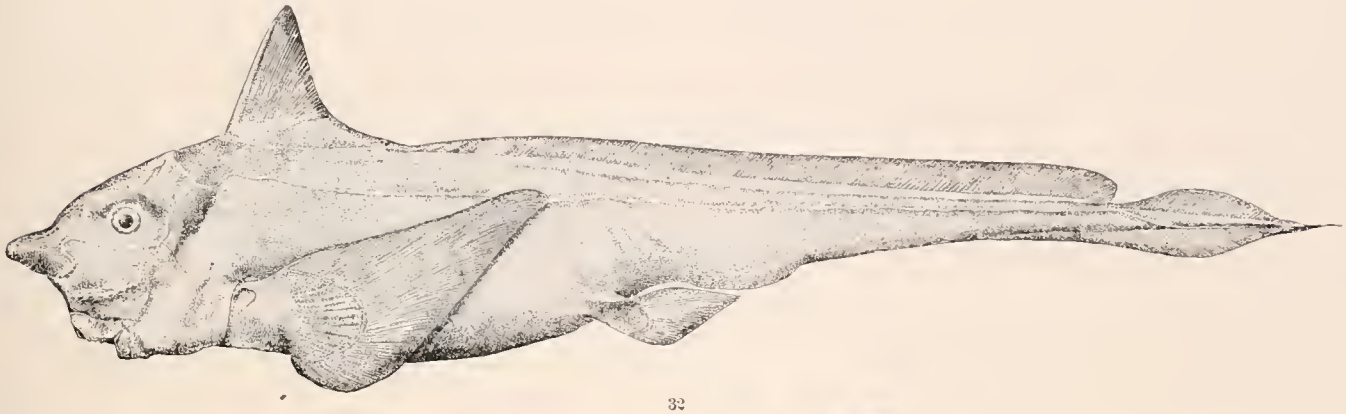

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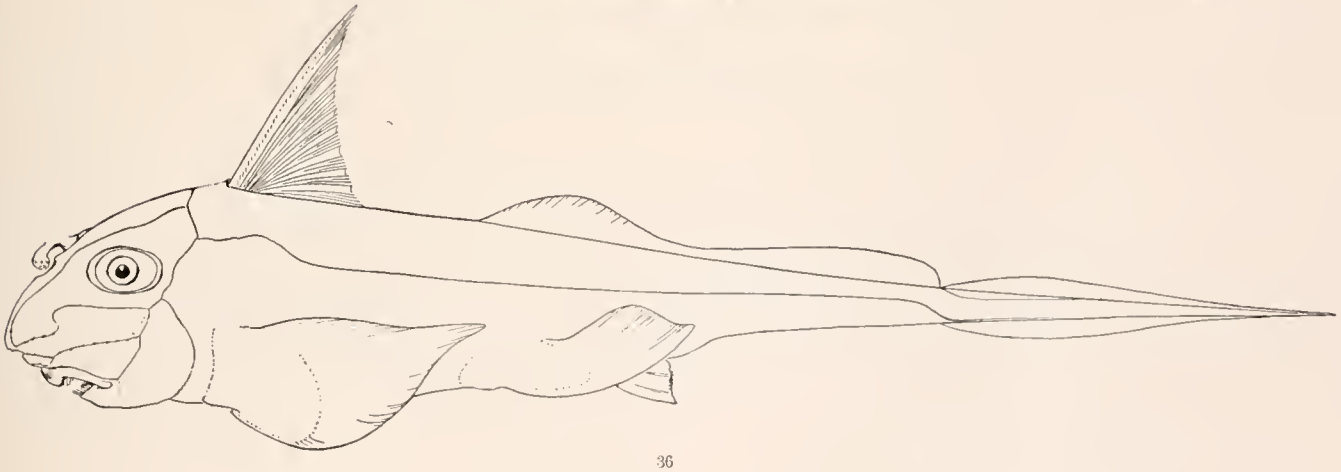
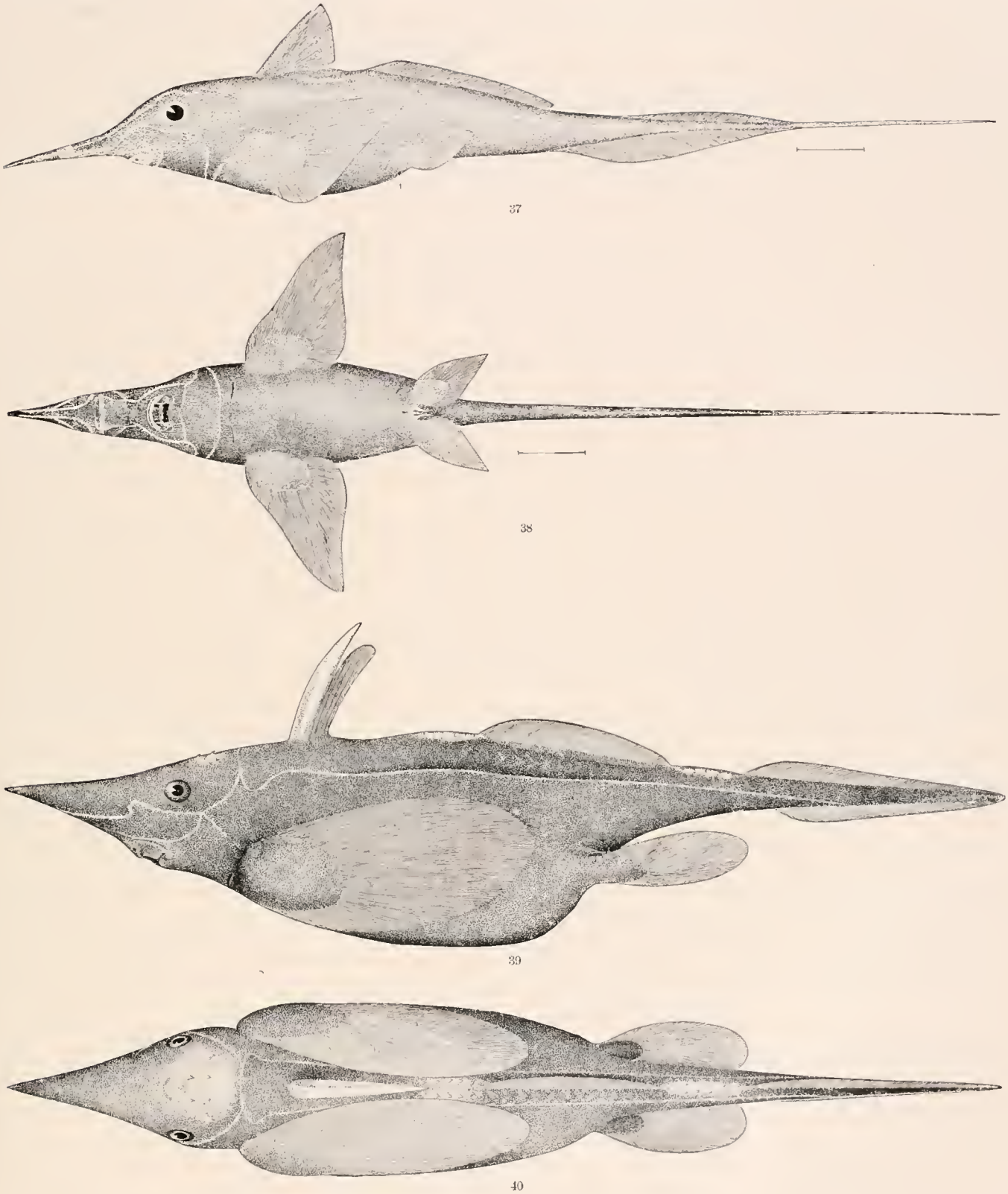


36

31. Chimæra monstrosa. (p. 31.) 32–35. Chimæra affinis. (p. 31.) 36. Callorhynchus antarcticus. (p. 32.)



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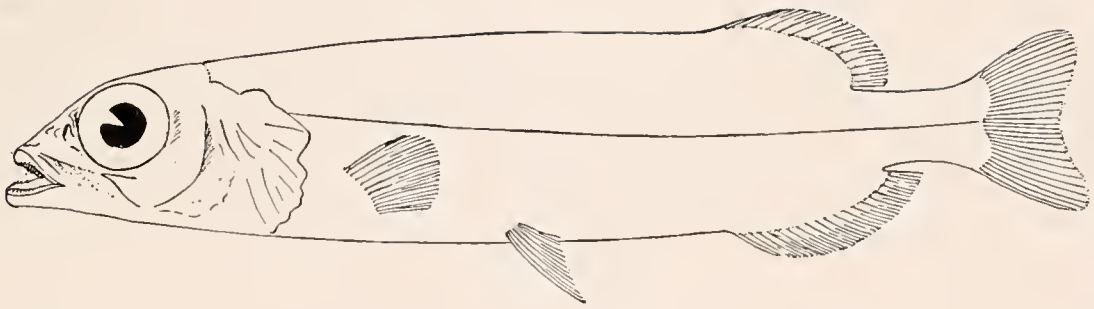
38

39

40

37–40. Harriotta Raleighana. (p. 33)



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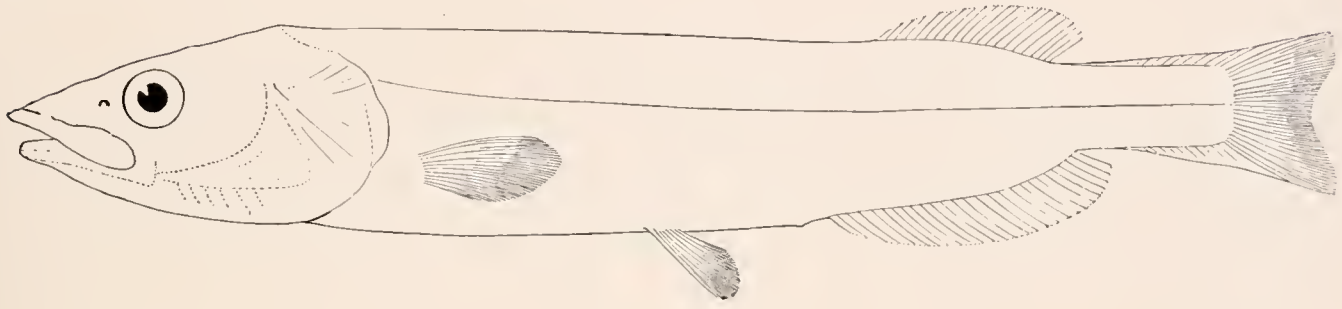

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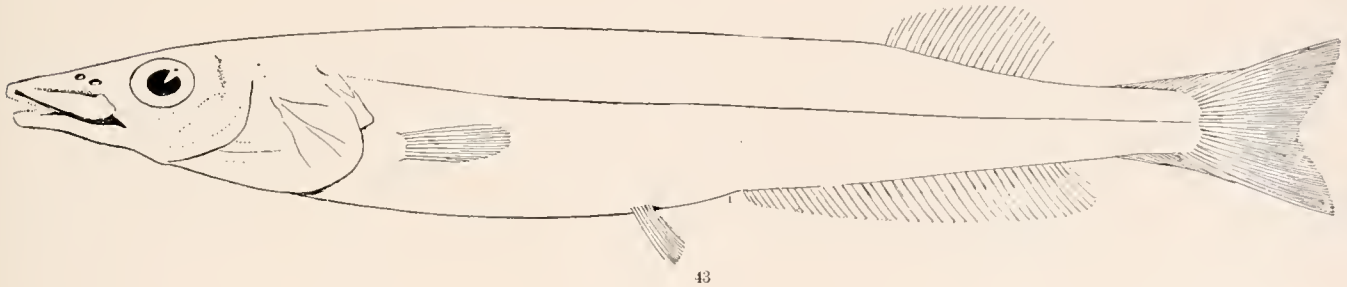

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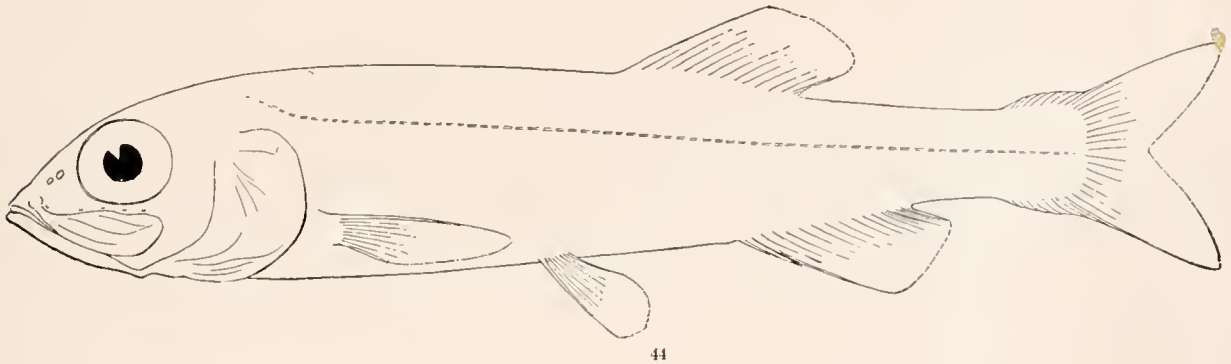
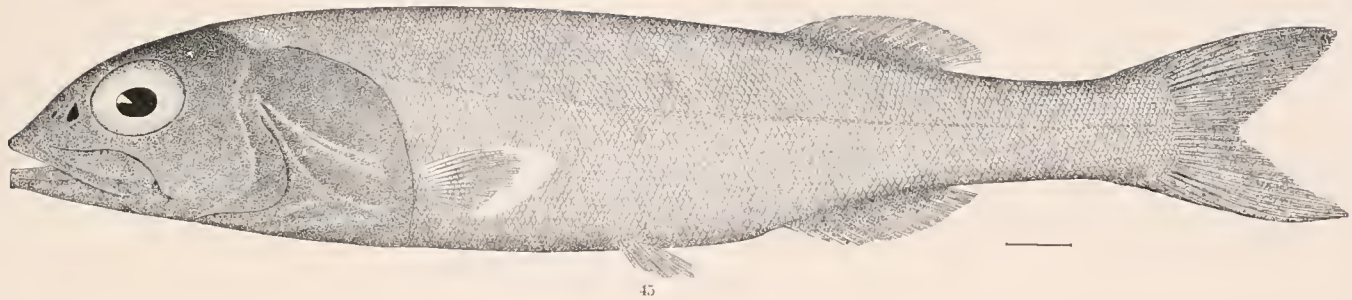


44

41. Alepocephalus rostratus. (p. 36.)
43. Conocara macroptera. (p. 39.)

42. Alepocephalus niger. (p. 38.)
44. Bathytroctes macrolepis. (p. 41.)



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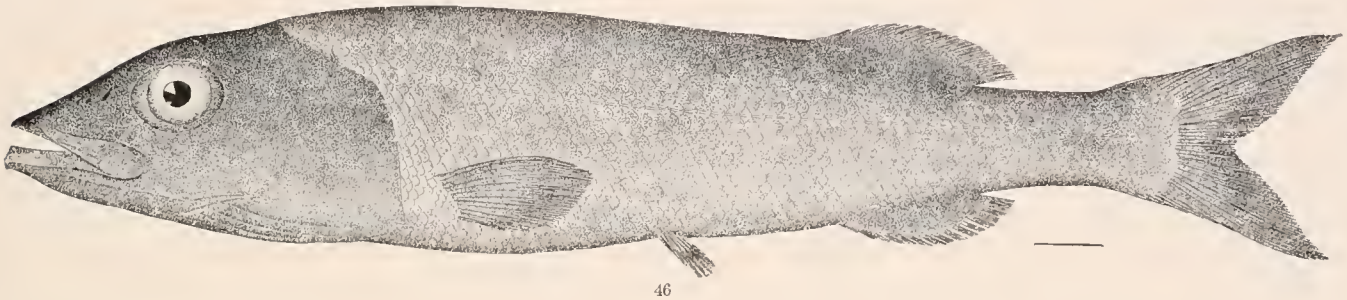

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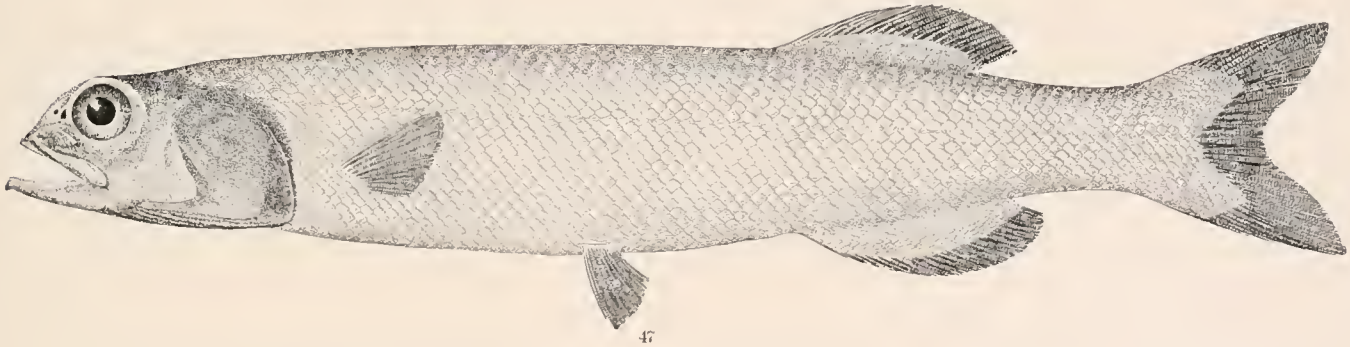

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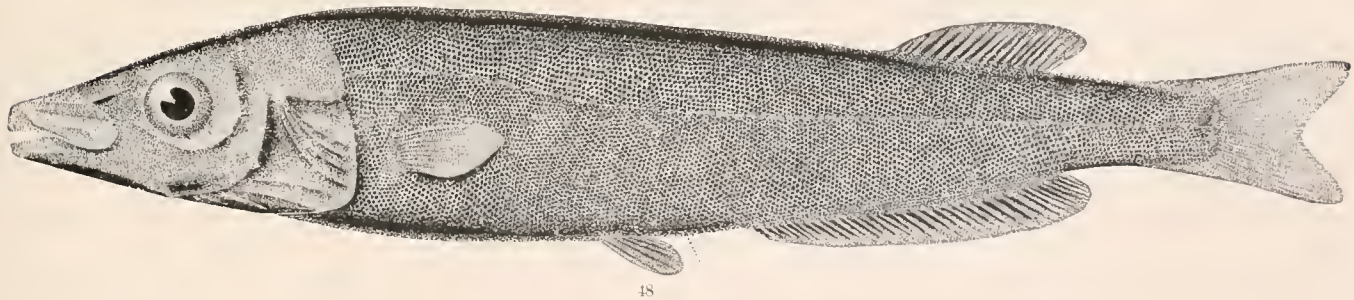
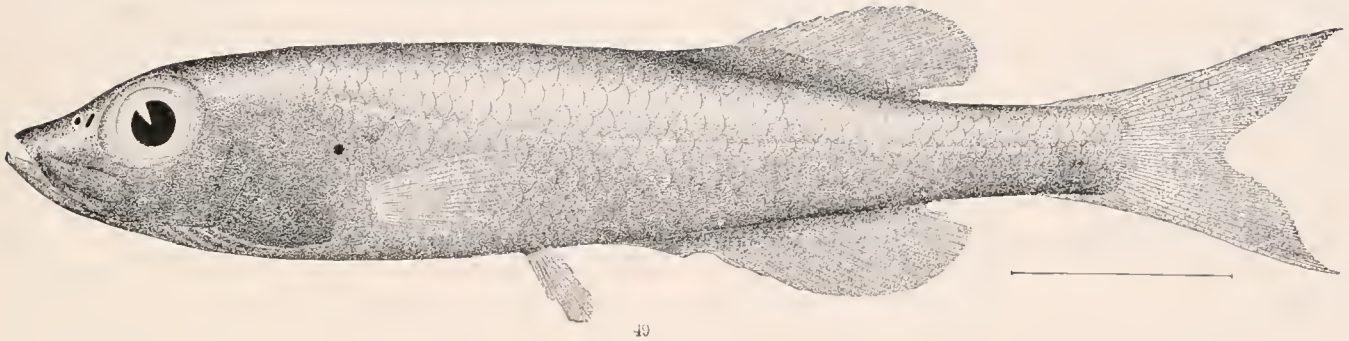


48

45. Alepocephalus Agassizii. (p. 37.)
47. Alepocephalus Bairdii. (p. 38.)

46. Alepocephalus productus. (p. 37.)
48. Conocara McDonaldi. (p. 39.)



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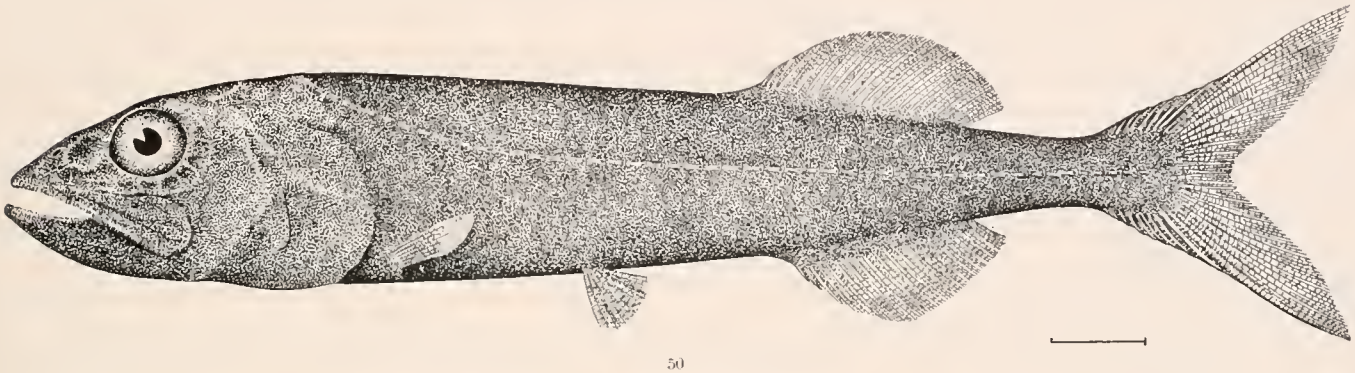

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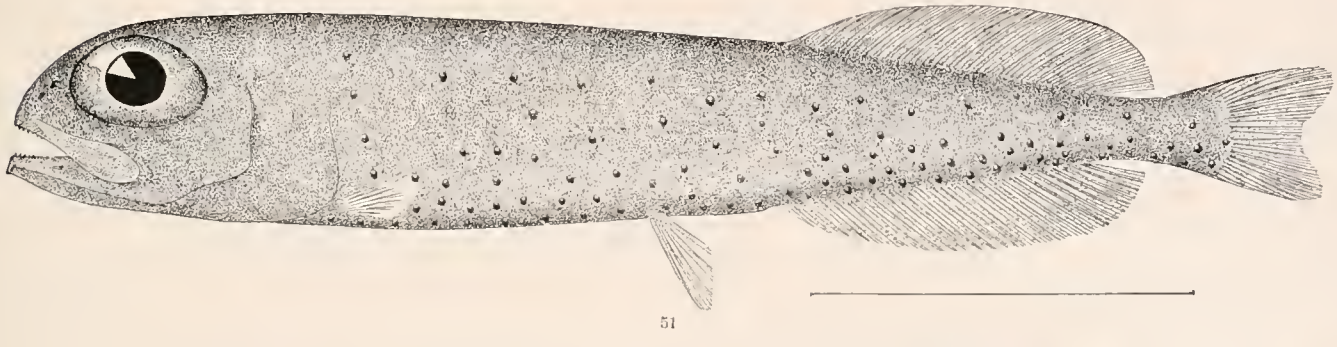

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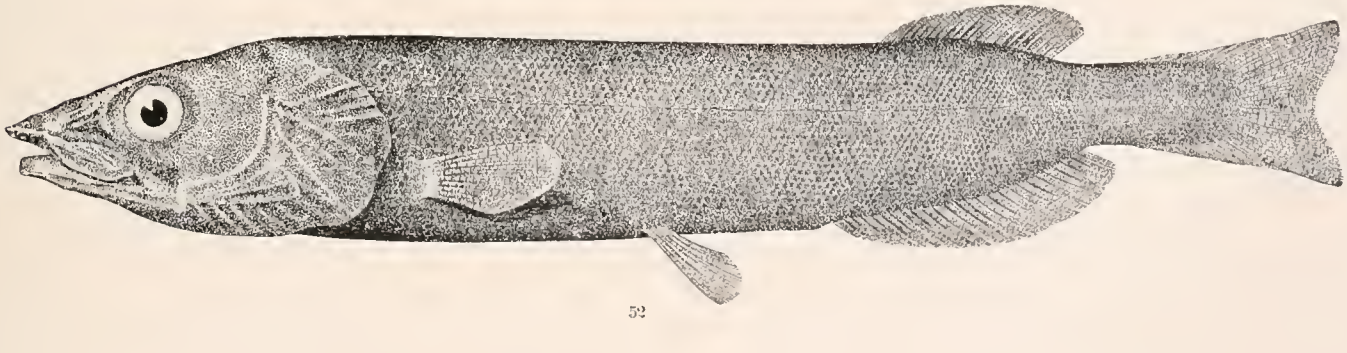
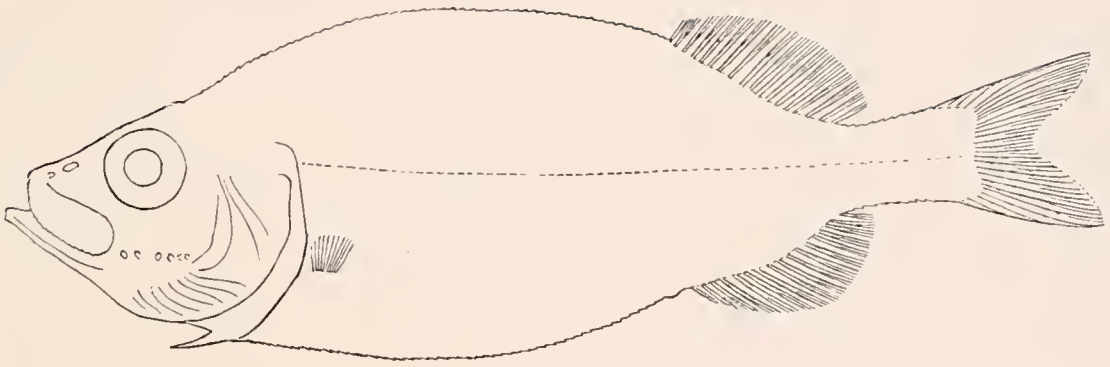


52

49. Bathytroctes antillarum. (p. 44.)
51. Aleposomus Copei. (p. 47.)

50. Bathytroctes æquatoris. (p. 44.)
52. Pterothrissus gissu. (p. 51.)



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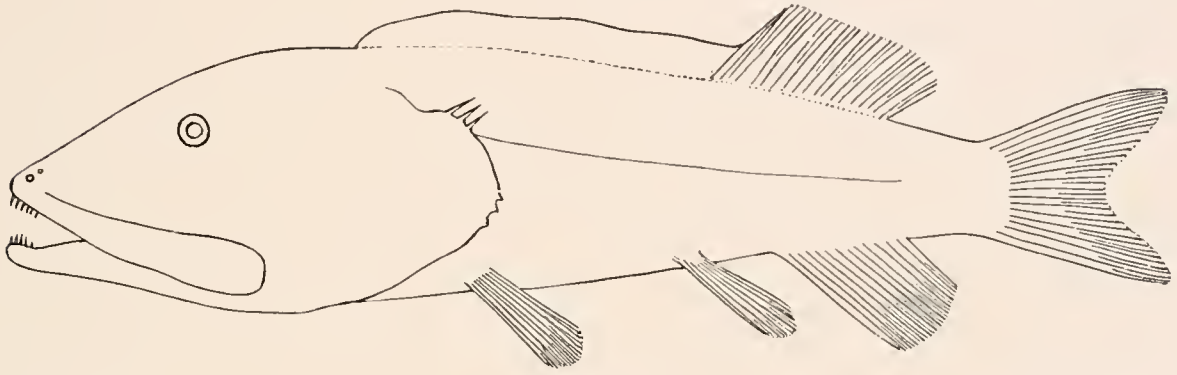

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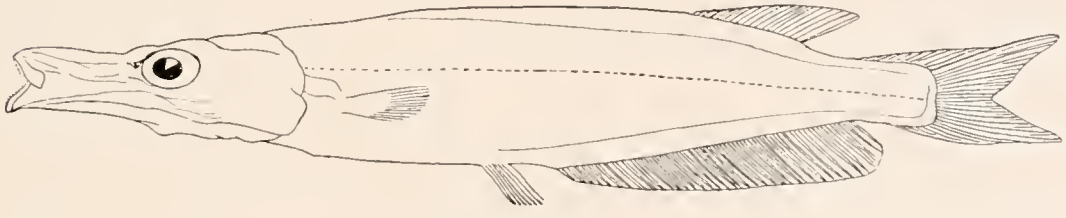
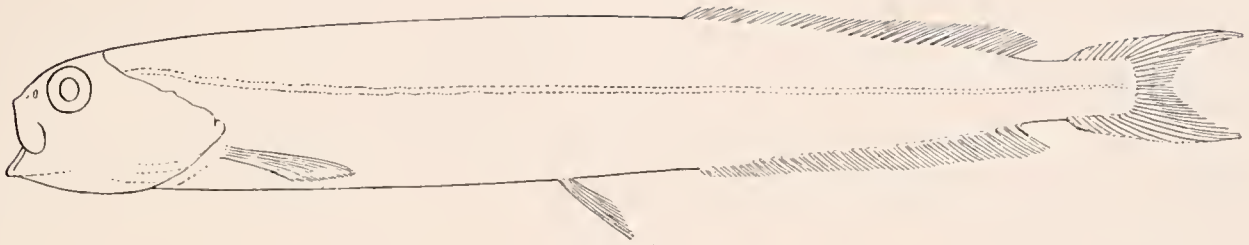


55

56

53. Platytroctes apus. (p. 46.)
55. Aulastomatomorpha phosphorops. (p. 50.)
54. Anomalopterus pinguis. (p. 49.)
56. Leptoderma macrops. (p. 49.)



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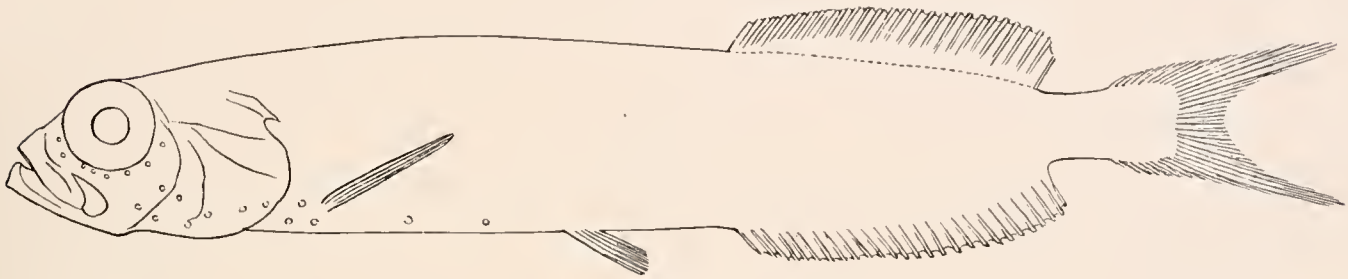

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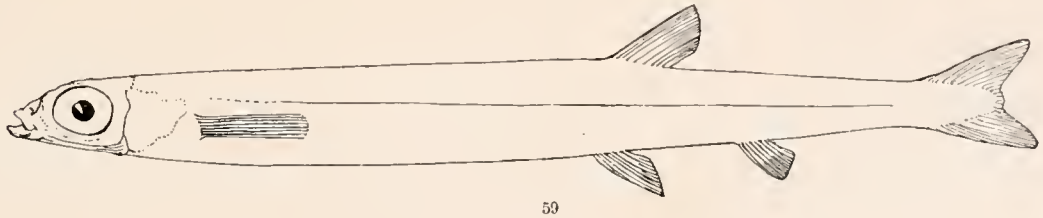

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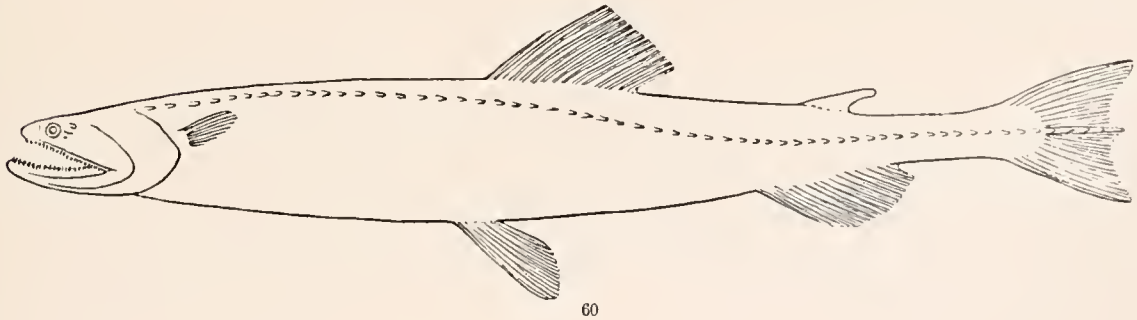
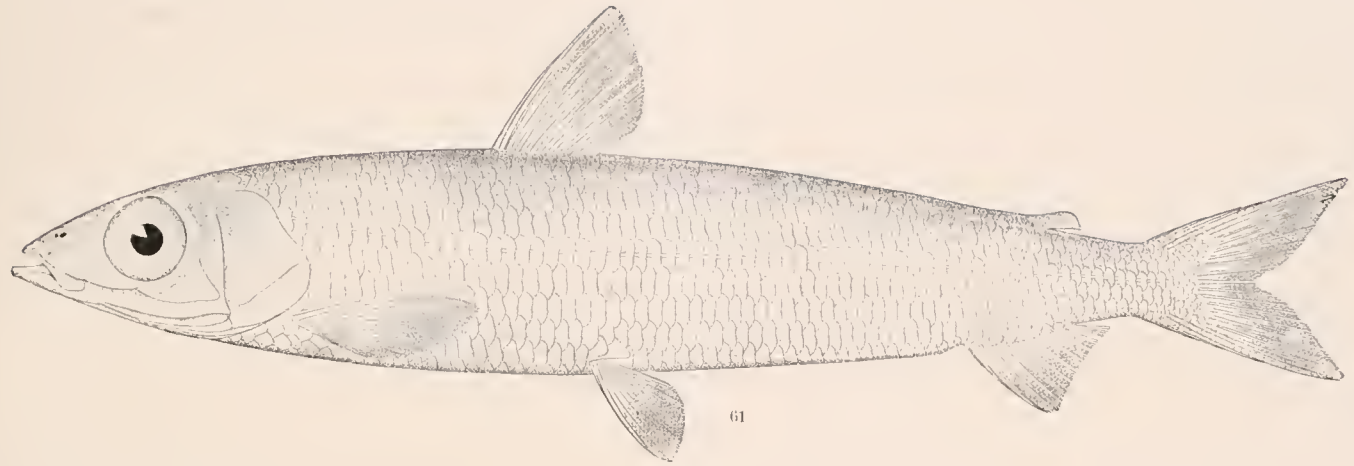


60

57. Xenodermichthys nodulosus. (p. 46.)
59. Microstoma rotundatum. (p. 53.)

58. Aleposomus socialis. (p. 48.)
60. Harpodon macrochir. (p. 59.)



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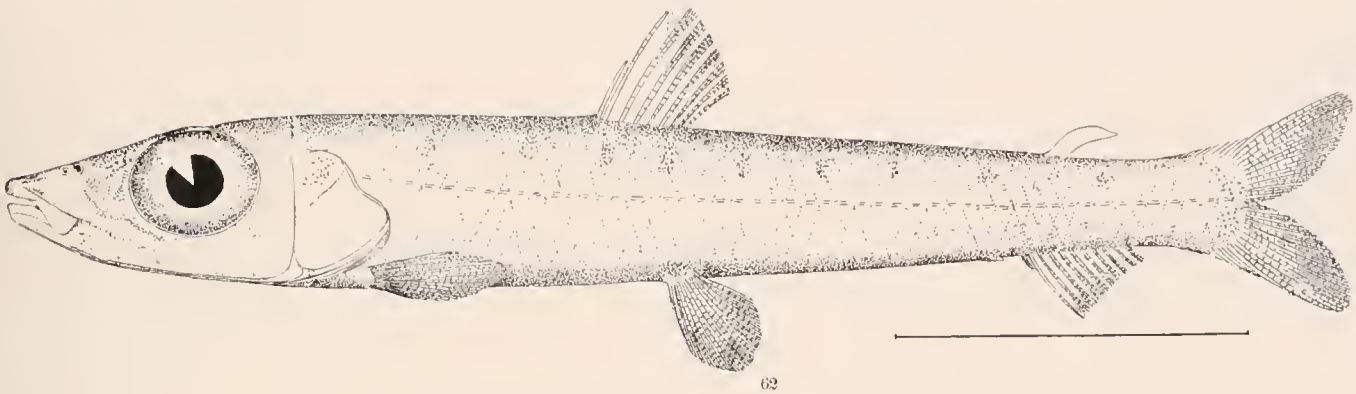

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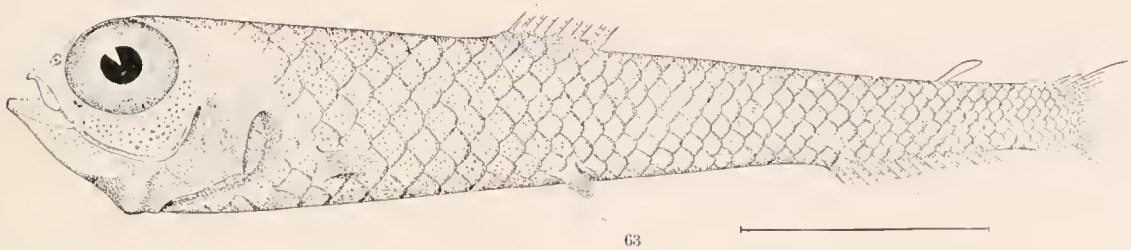

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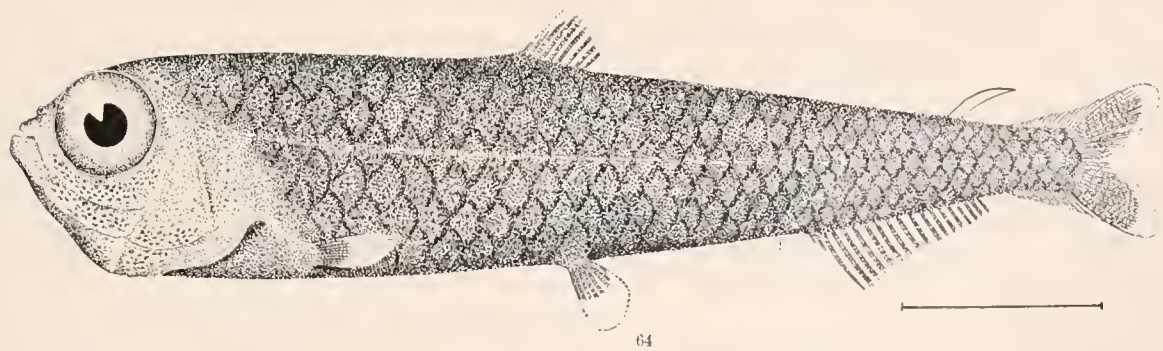
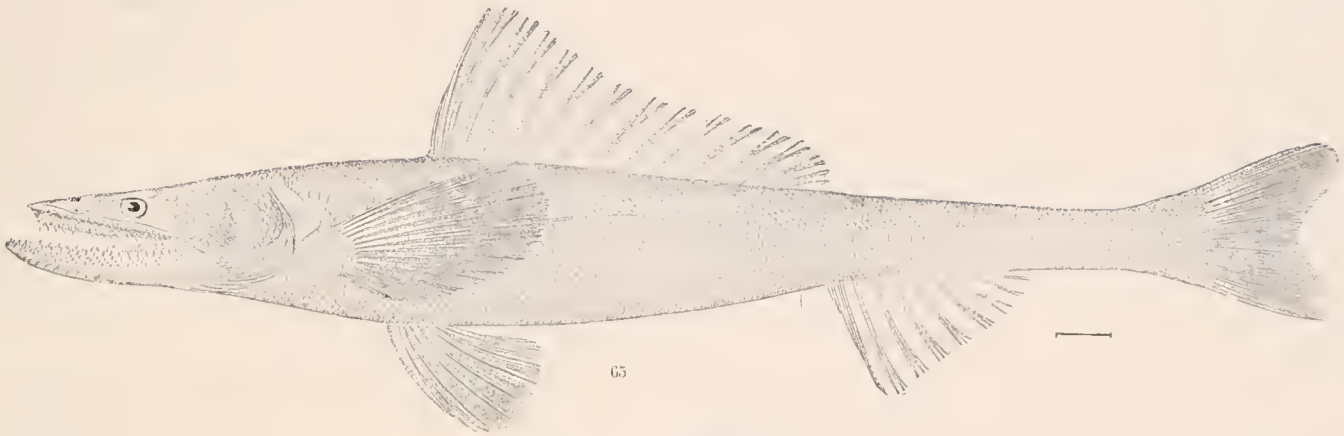


64

61. Argentina silus. (p. 52.)
63. Bathylagus euryops. (p. 55.)

62. Argentina striata. (p. 52.)
64. Bathylagus Benedicti. (p. 55.)



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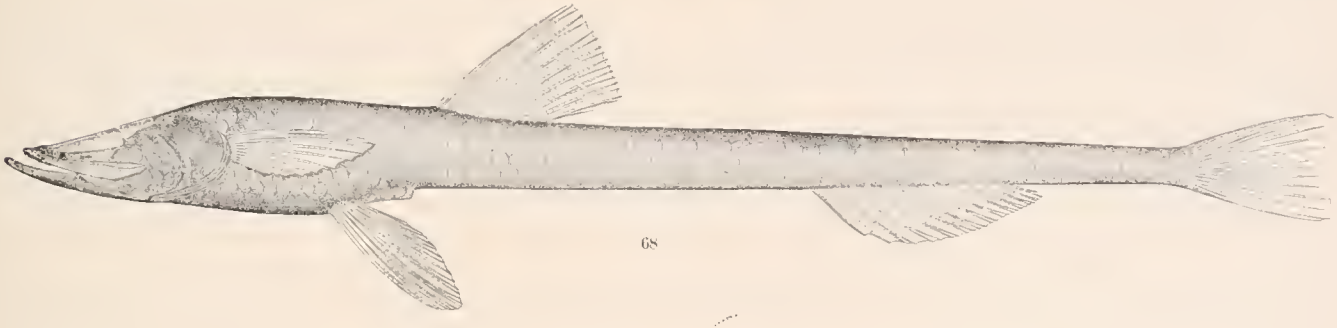

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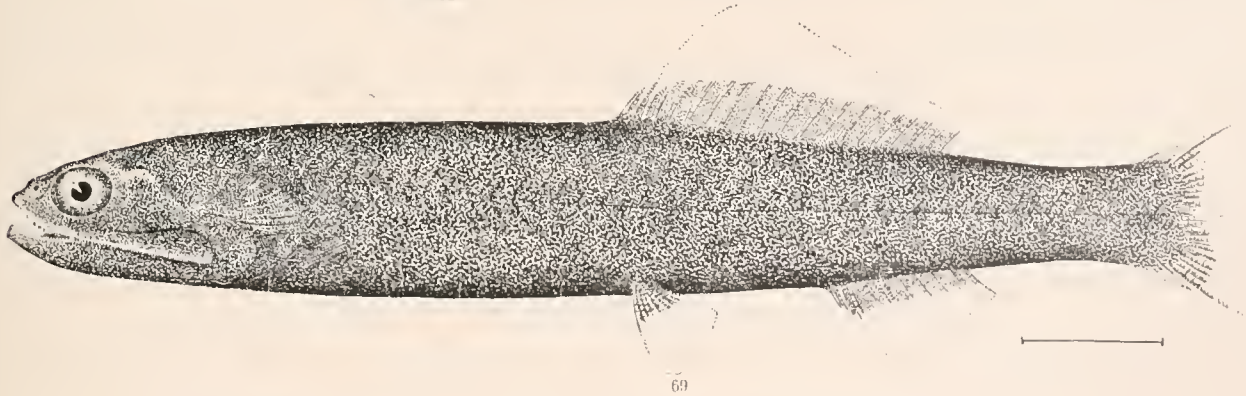
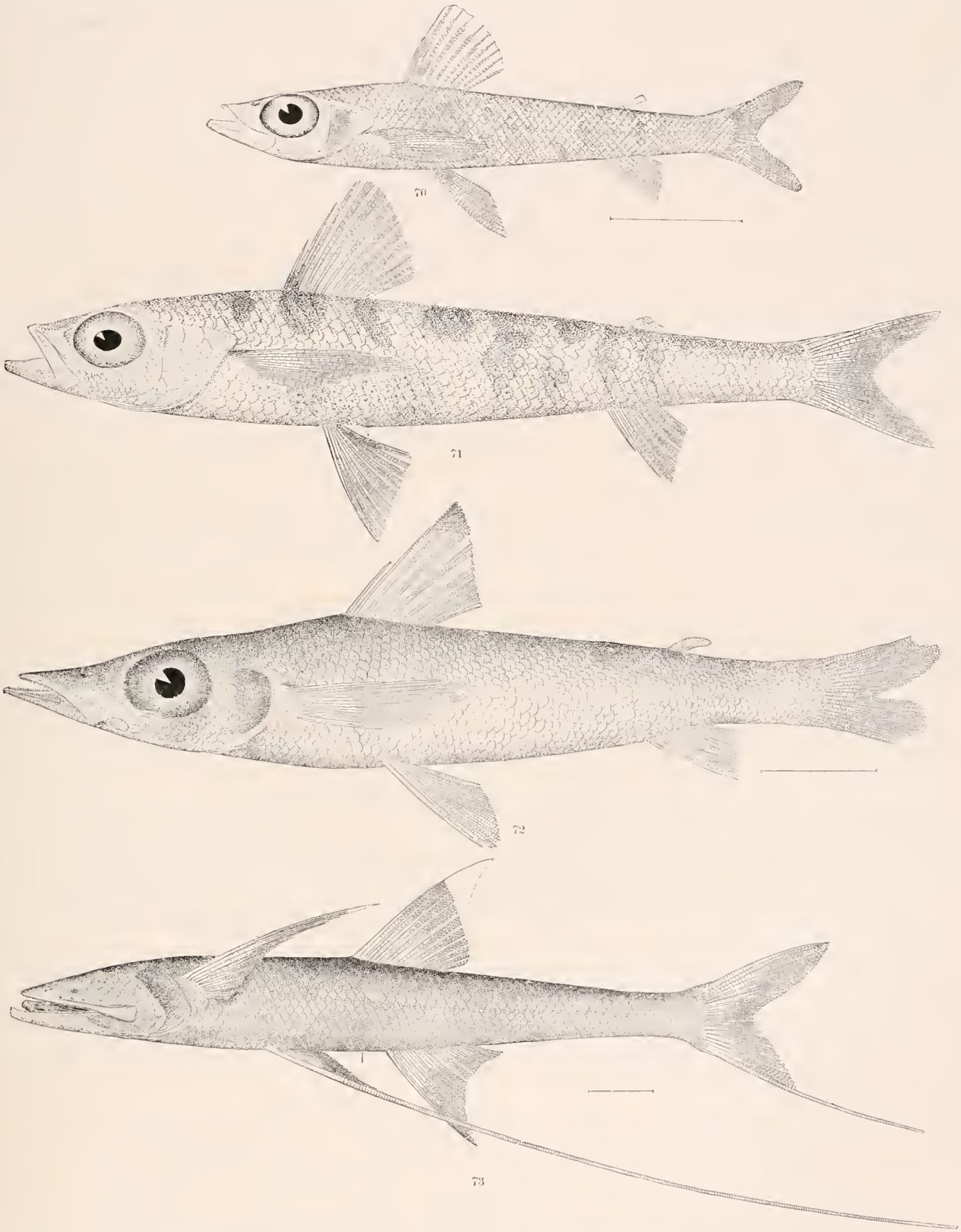
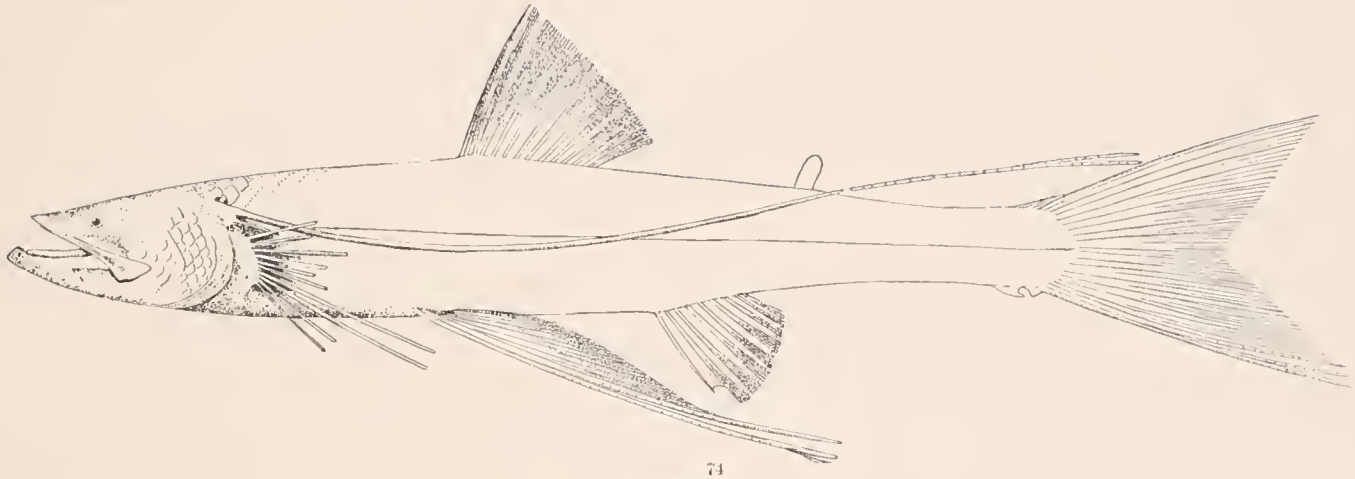


69

65, 66. Bathysaurus ferox. (p. 58.) 67, 68. Ipnops Murrayi. (p. 67.) 69. Bathylaco nigricans. (p. 57.)



70. Chlorophthalmus Agassizii. (p. 60.)
71. Chlorophthalmus chalybeius. (p. 60.)
72. Chlorophthalmus truculentus. (p. 61.)
73. Benthosaurus grallator. (p. 62.)



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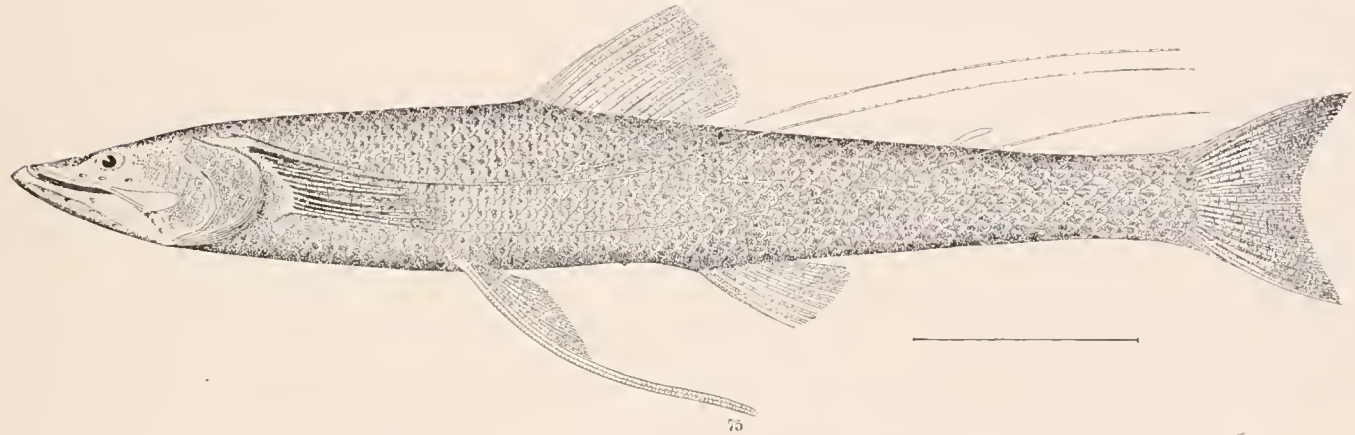

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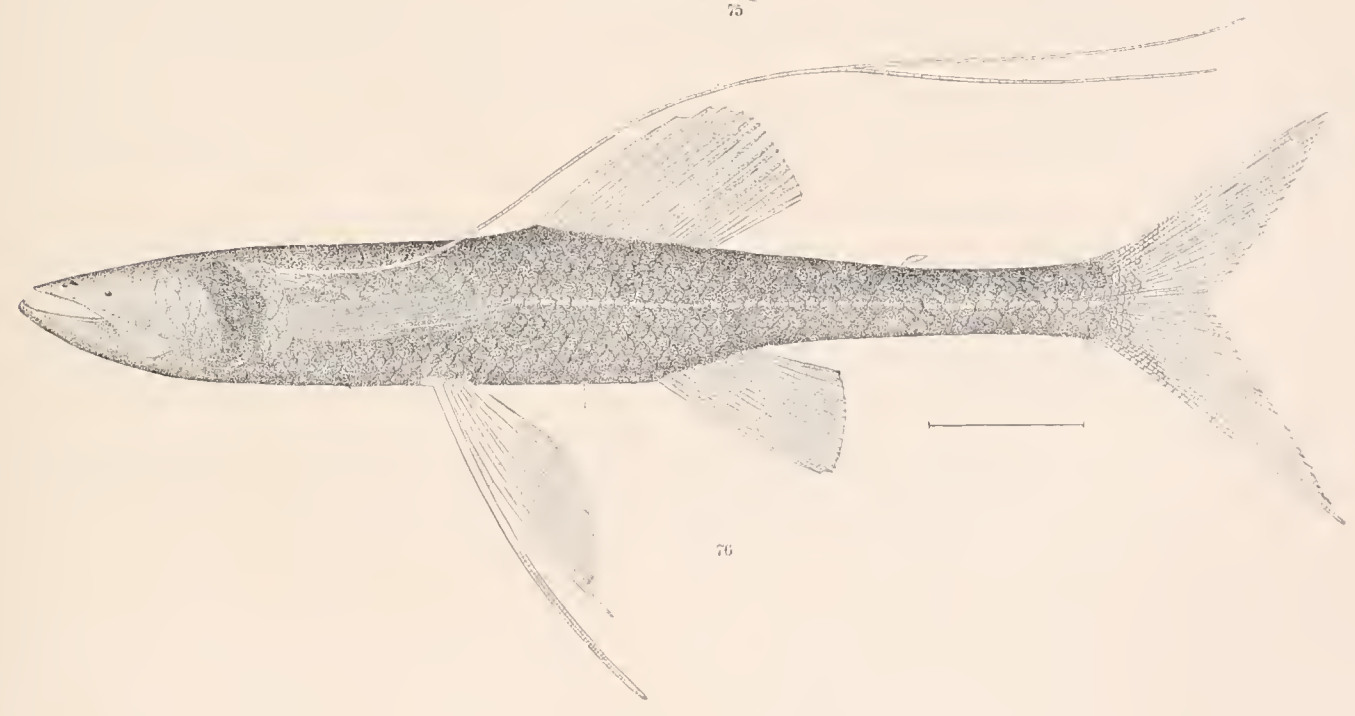
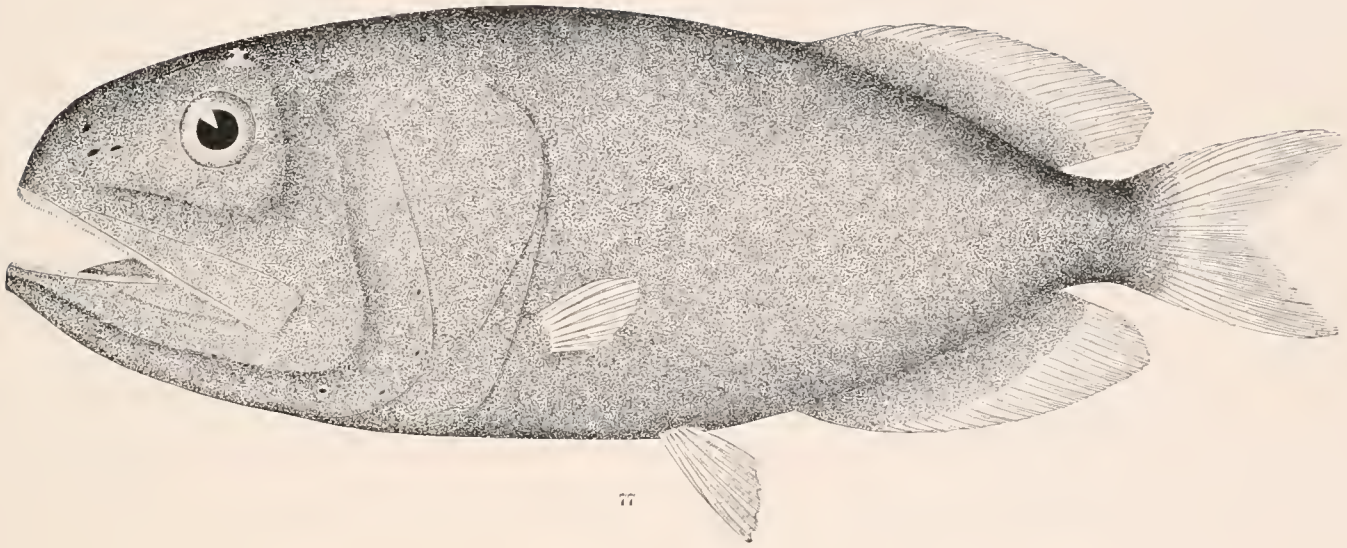


76

74. Bathypterois dubius. (p. 64.)
75. Bathypterois quadrifilis. (p. 65.)
76. Bathypterois longipes. (p. 66.)



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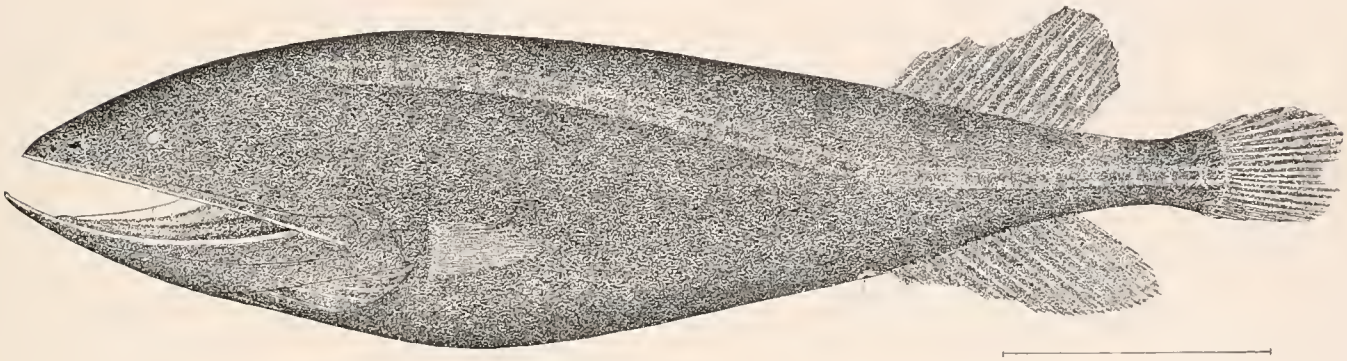

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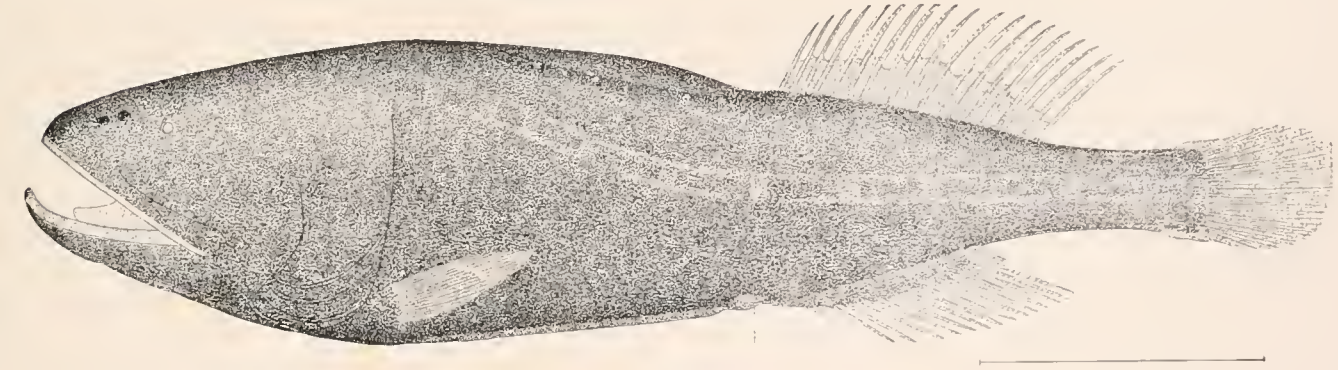
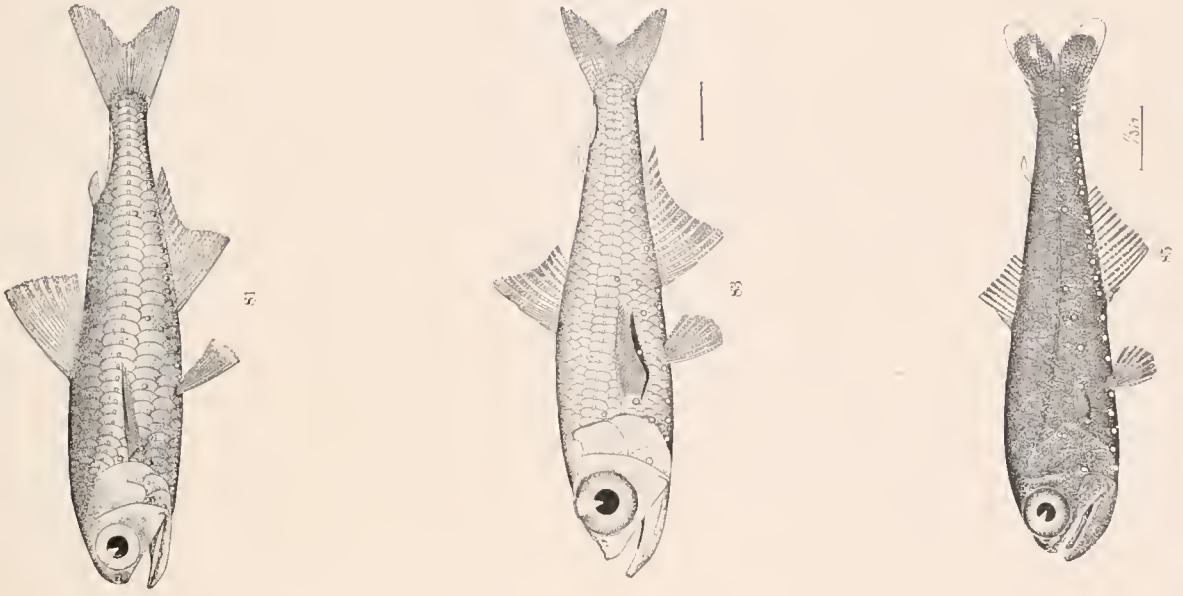


79

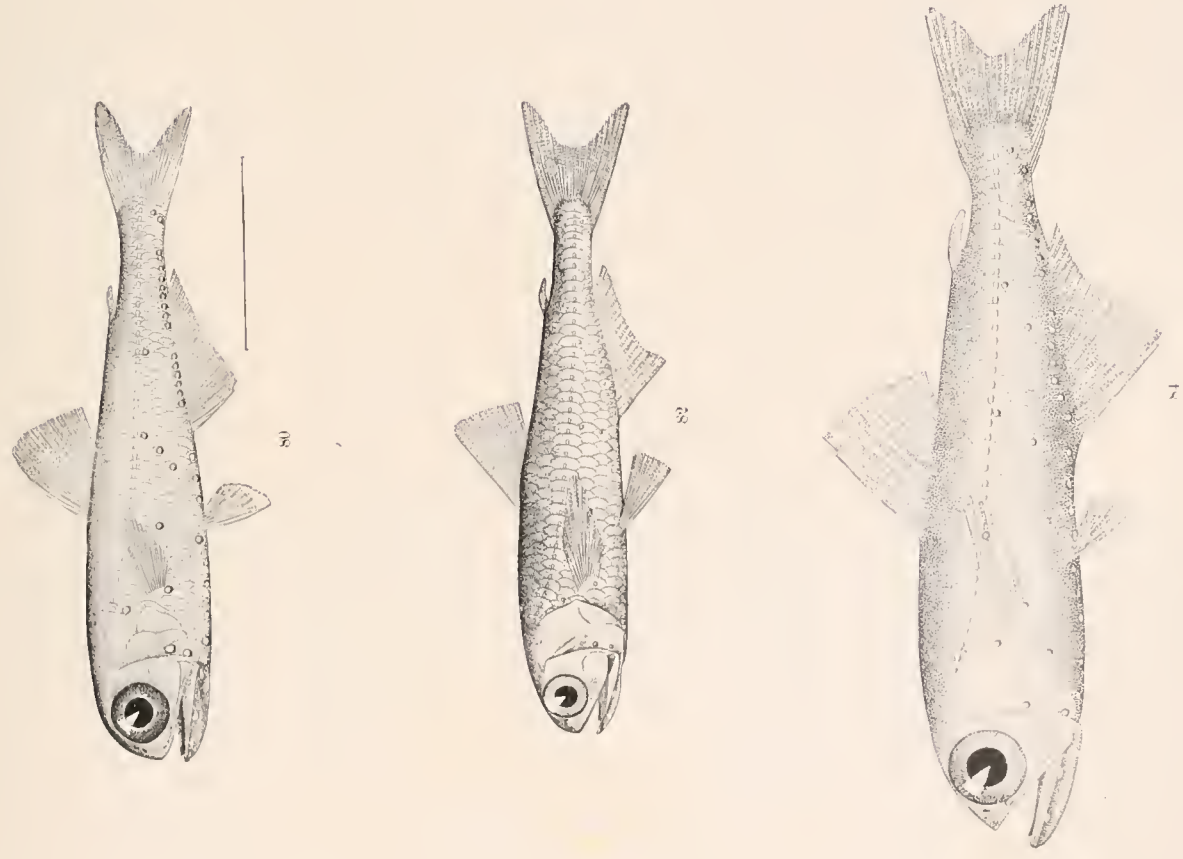
77. Rondeletia bicolor. (p. 68.)

78. Cetomimus Gillii. (p. 69.)

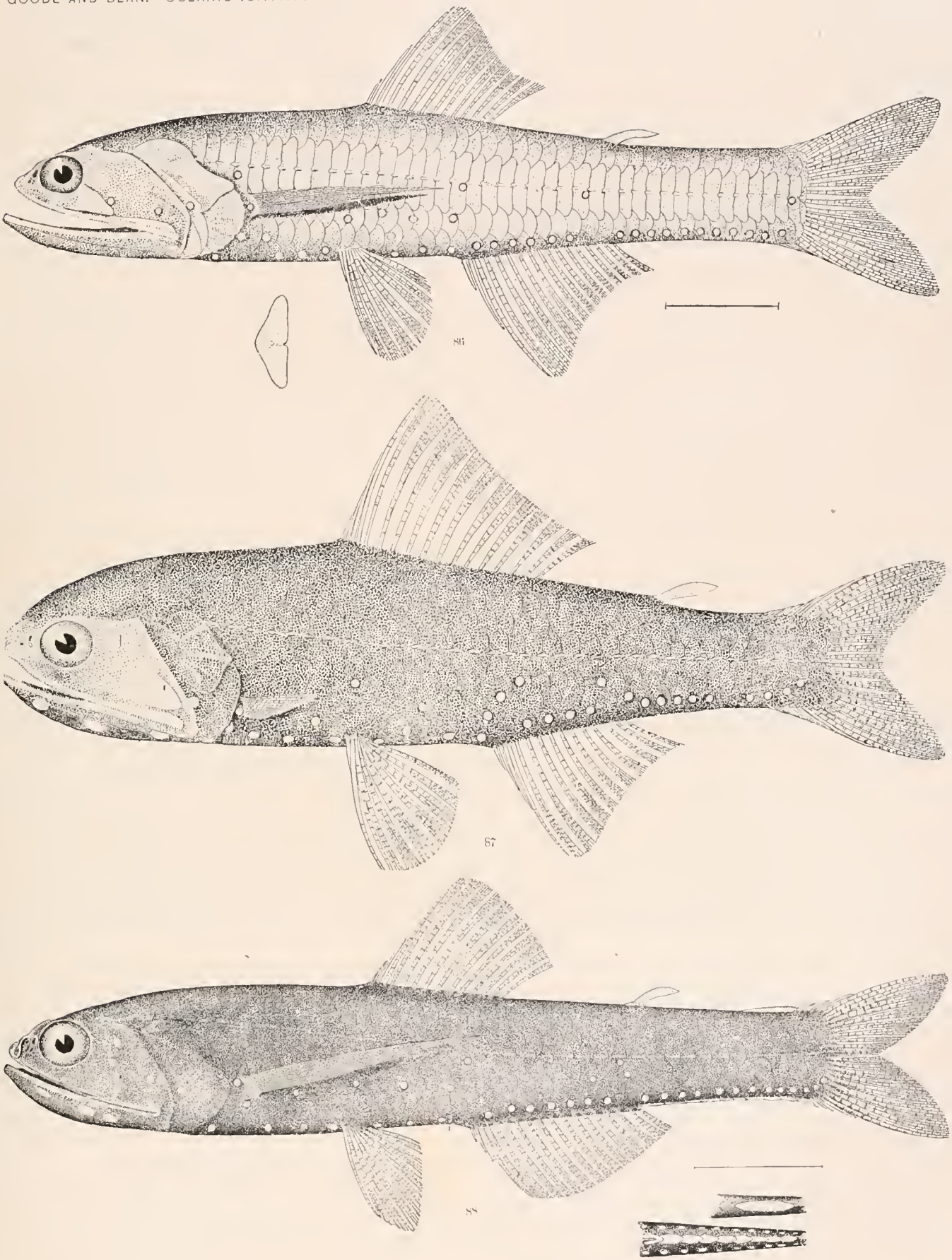
79. Cetomimus Storeri. (p. 69.)



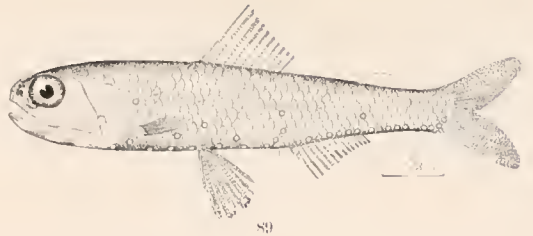
81. Myctophum opalinum. (p. 72.)
83. Myctophum Benoiti. (p. 74.)
85. Bathysema Müller. (p. 76.)



80. Myctophum punctatum. (p. 71.)
82. Myctophum Humboldti. (p. 73.)
84. Myctophum Remigii. (p. 75.)



86. LAMPANYCTUS CROCODILUS. (p. 79.) 87. LAMPANYCTUS GEMELLARII. (p. 80.)
88. LAMPANYCTUS GEMMIFER. (p. 80.)



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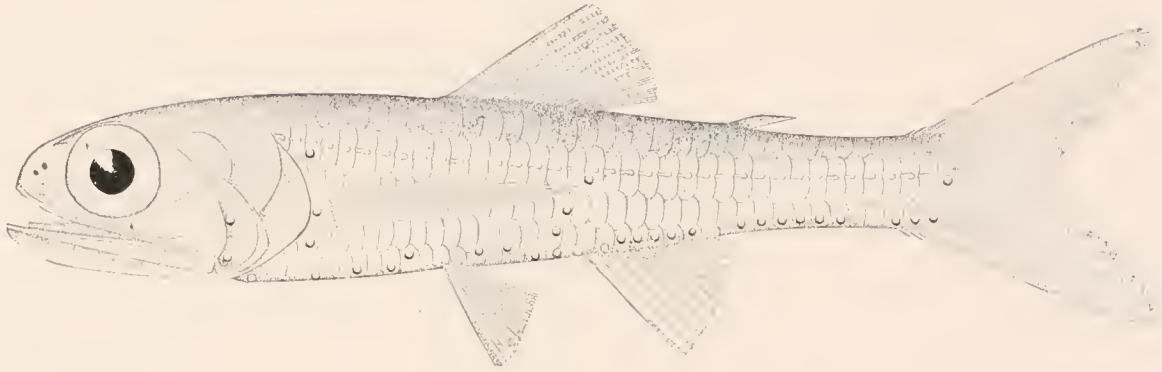
90



91

92

93

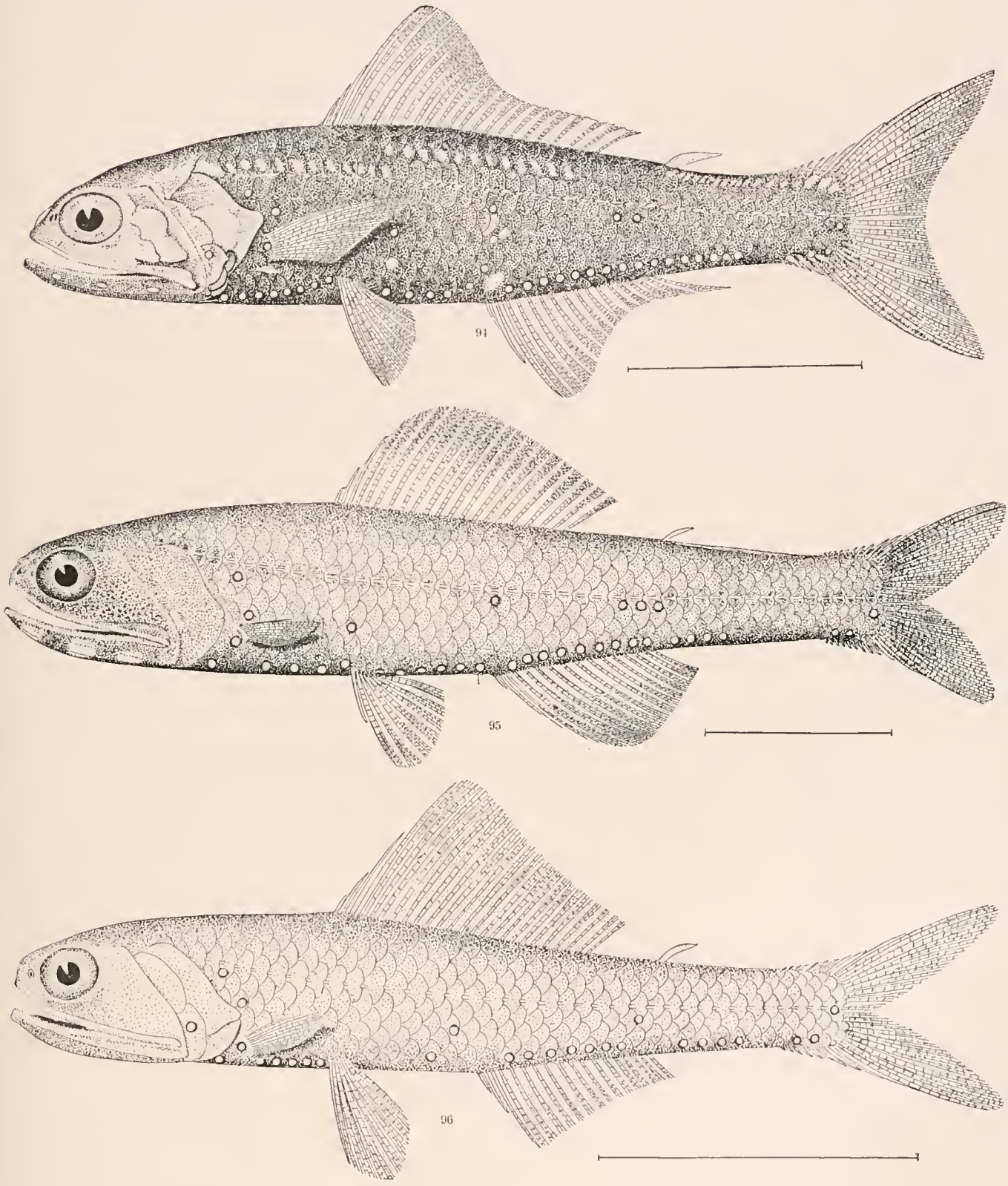
89. Lampanyctus lacerta. (p. 81.)

92. Lampanyctus alatus. (p. 79.)

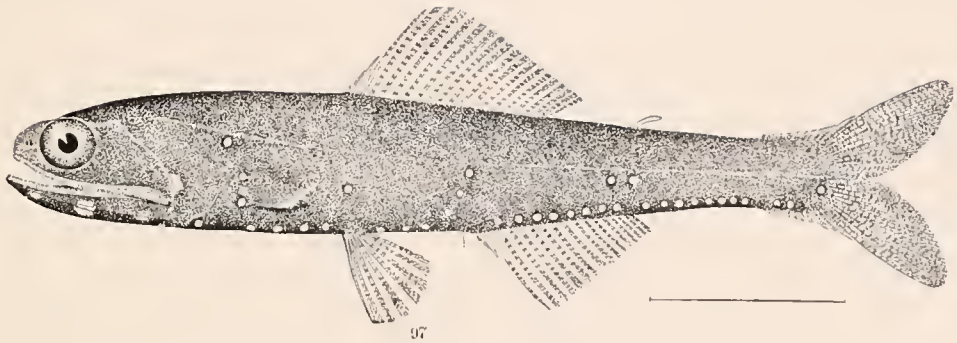
91. Ceratoscopelus maderensis. (p. 82.)

90. Lampanyctus Günther. (p. 79.)

93. Diaphus theta. (p. 89)



94. Notoscopelus resplendens. (p. 83.) 95. Notoscopelus castaneus. (p. 84.)
96. Notoscopelus caudispinosus. (p. 84.)



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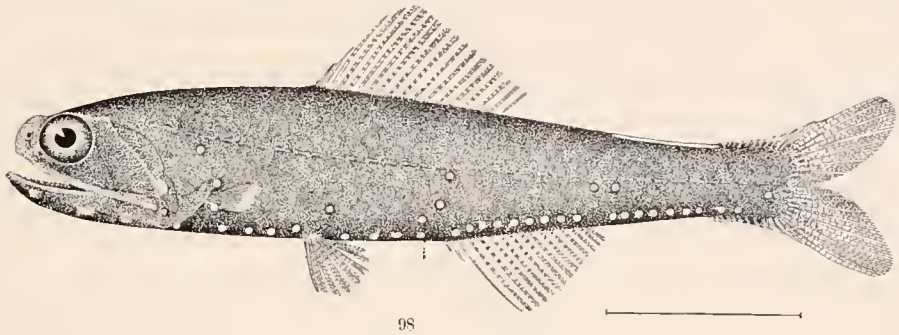

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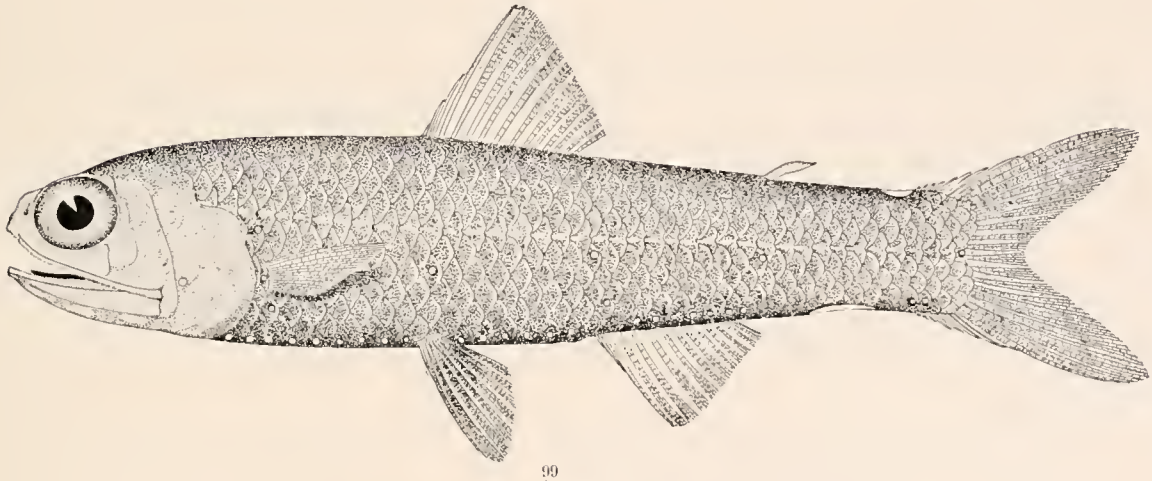

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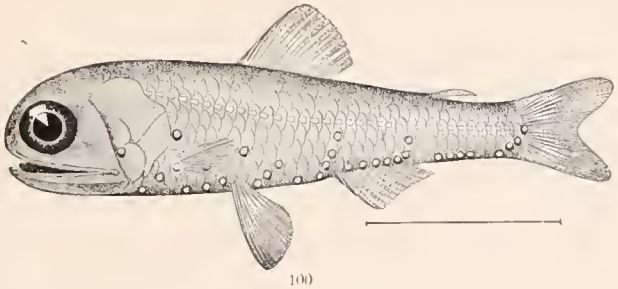
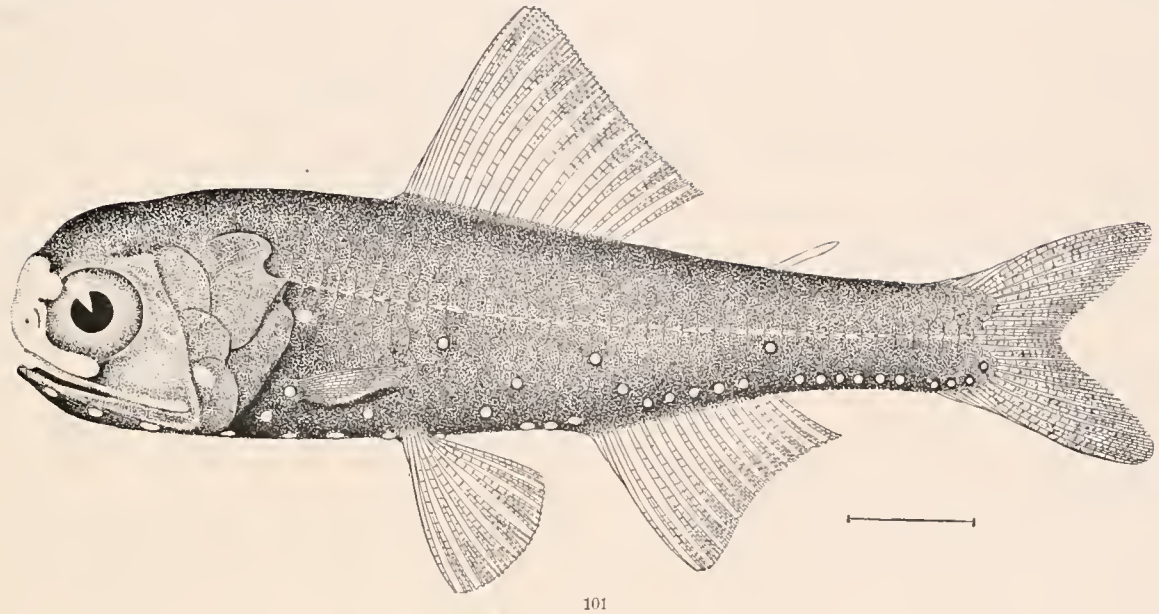


100

97. Notoscopelus quercinus. (p. 83.)
98. Notoscopelus margaritiferus. (p. 84.)
99. Lampadena speculigera. (p. 83.)
100. Collettia Rafinesquei. (p. 88.)



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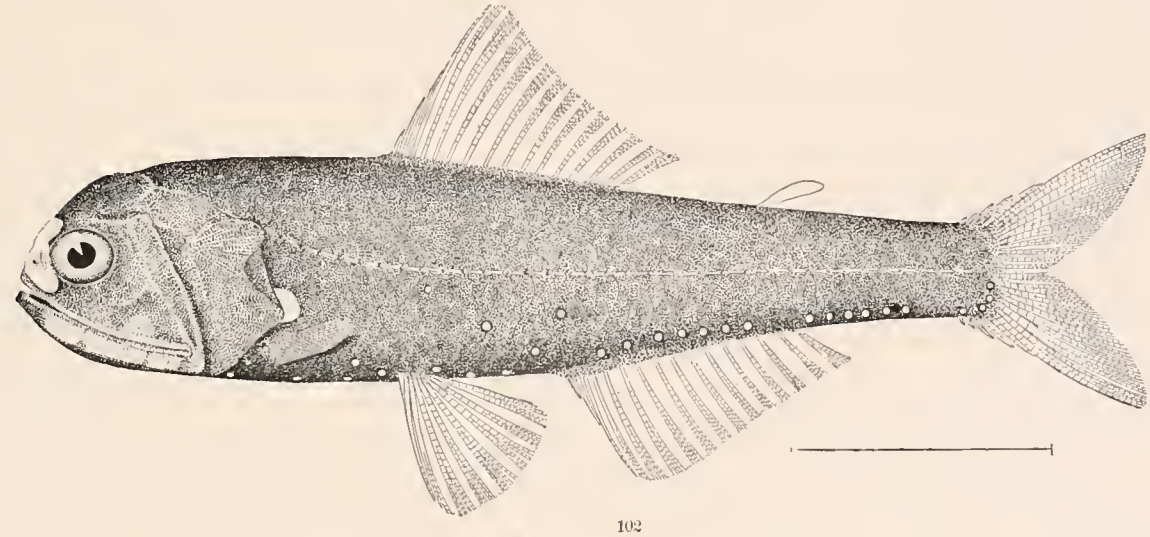

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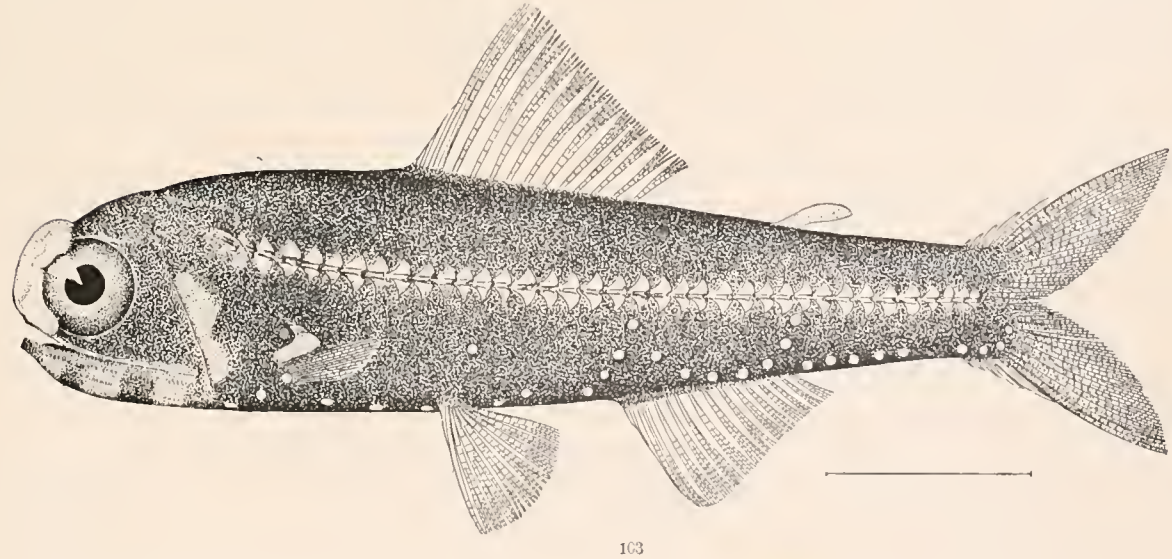
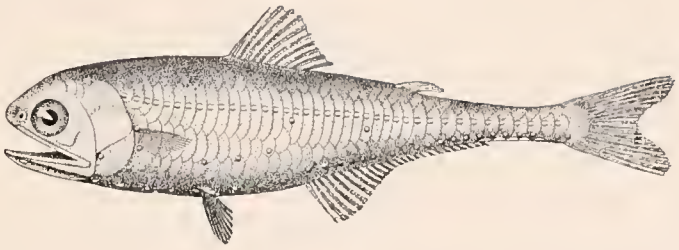


103

101. ÆTHOPRORA METOPOCLAMPA. (p. 86.) 102. ÆTHOPRORA LUCIDA. (p. 87.)
103. ÆTHOPRORA EFFULGENS. (p. 87.)



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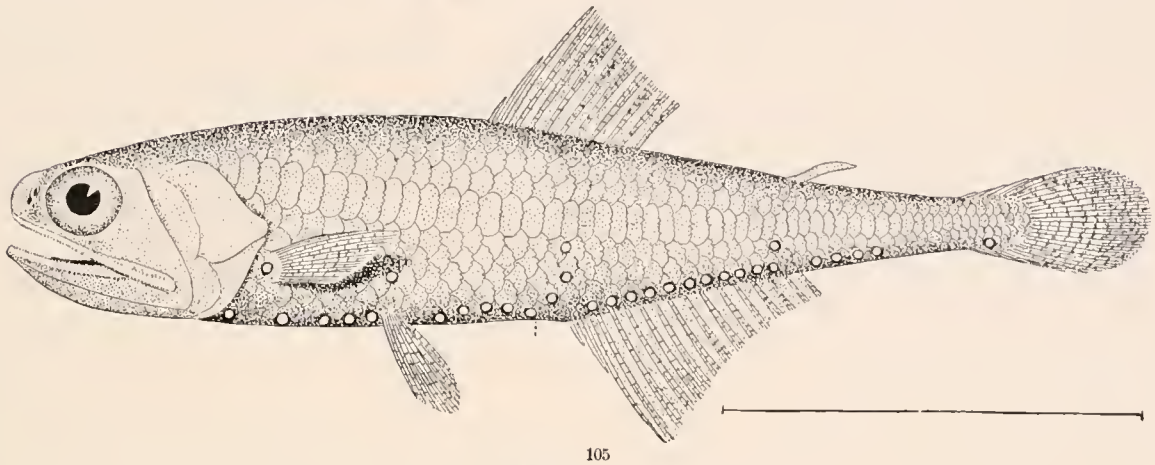

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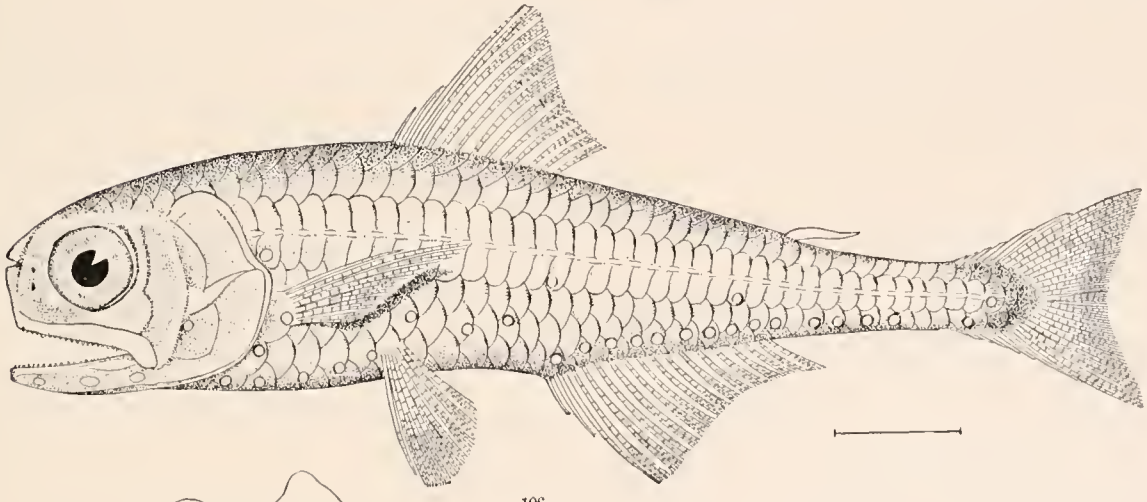

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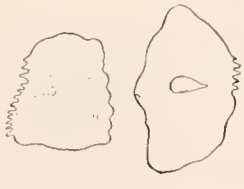
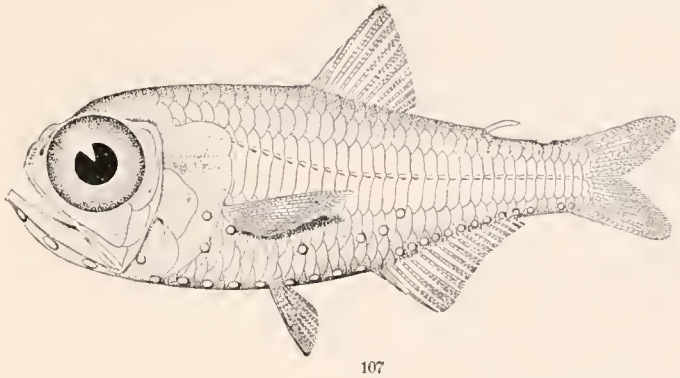
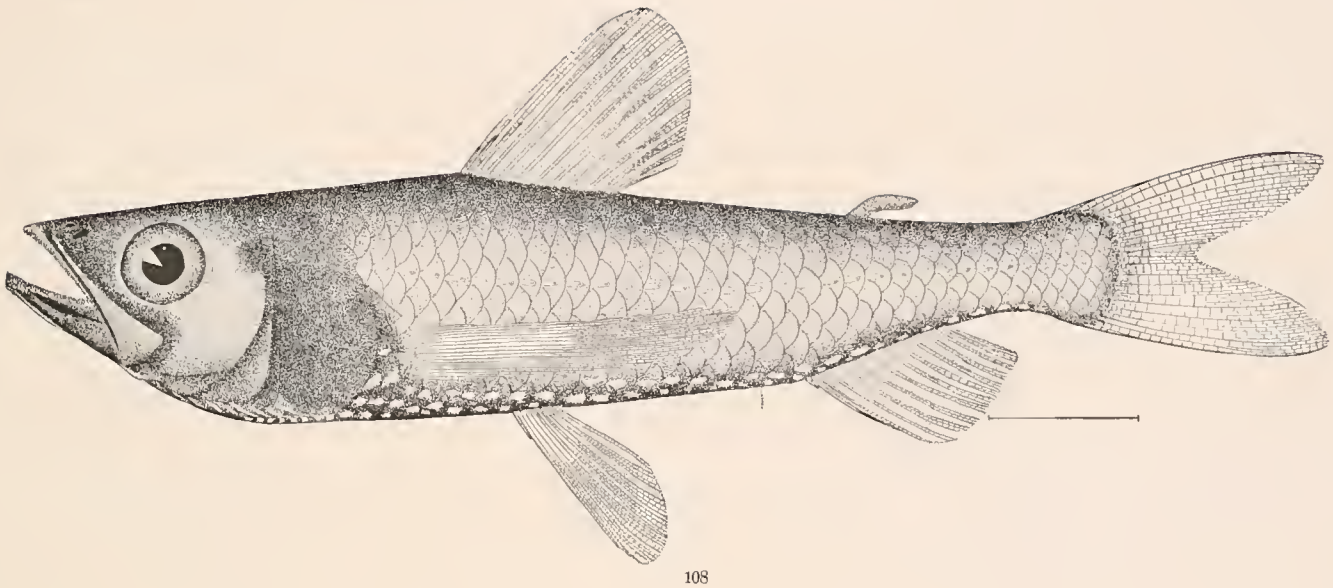




107

104. Rhinoscopelus Coccoi. (p. 90.)
106. Dasyscopelus asper. (p. 92.)

105. Tarletonbeania tenua. (p. 89.)
107. Electrona Rissoi. (p. 91.)



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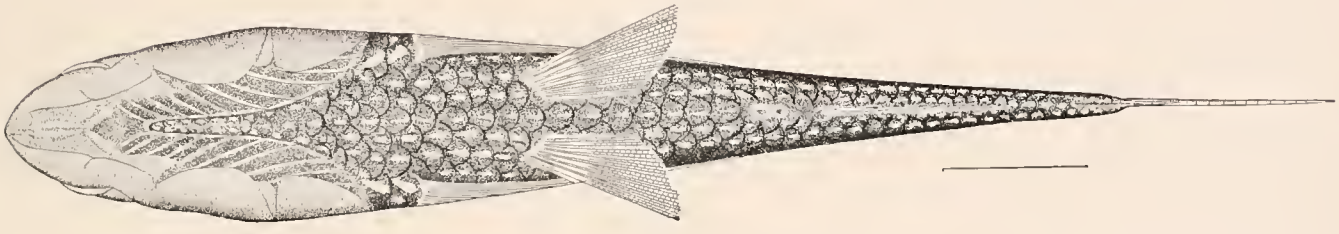

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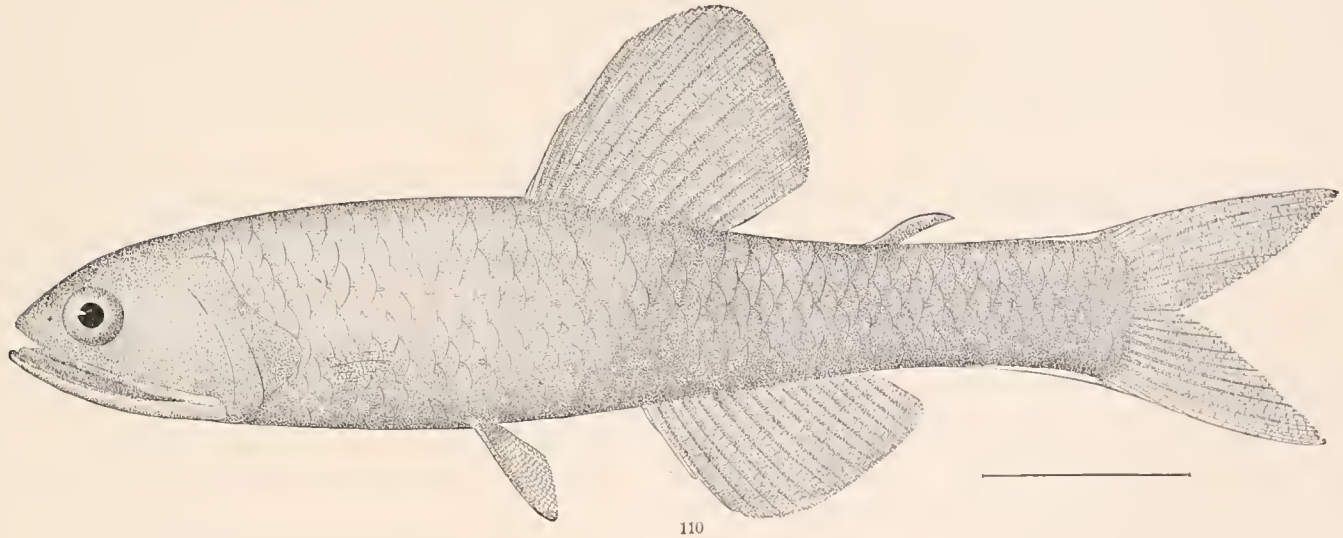
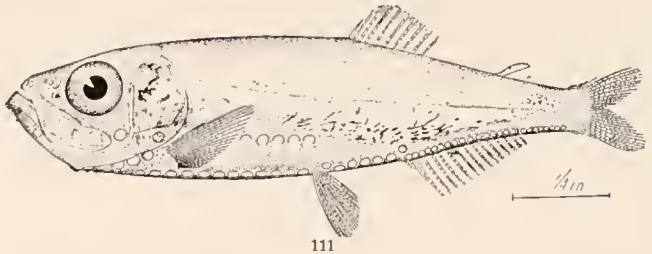


110

108, 109. Neoscopelus macrolepidotus. (p. 93.)

110. Nannobrachium MacDonaldi. (p. 94.)



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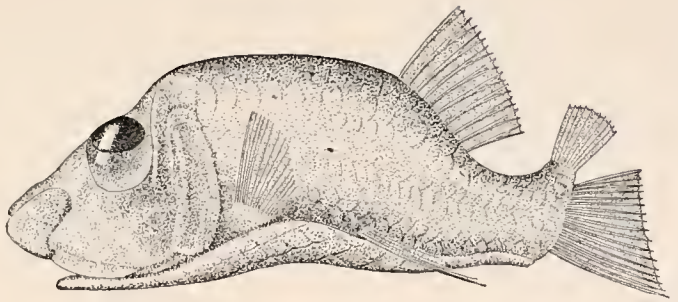

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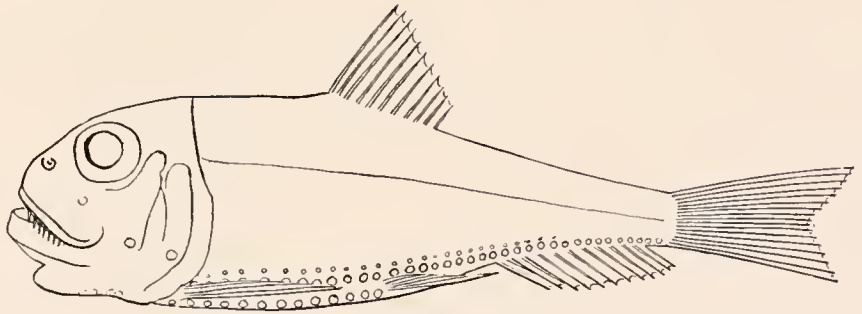


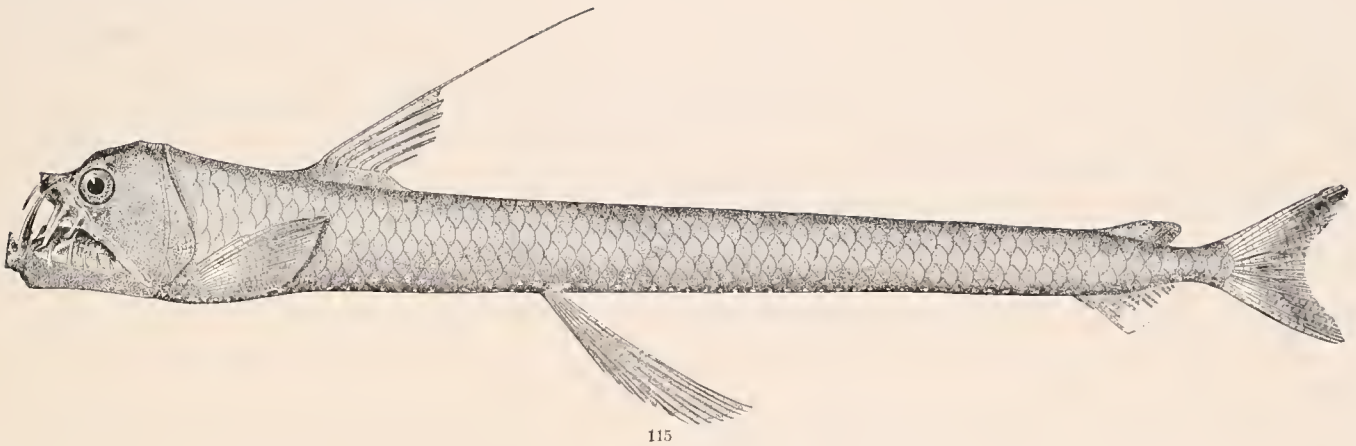
113

113*a*

114

111. Maurolicus borealis. (p. 96.)
113, 113*a*. Ichthyococcus ovatus. (p. 95.)

112. Opisthoproctus soleatus. (p. 95.)
114. Cyclothone microdon. (p. 99.)



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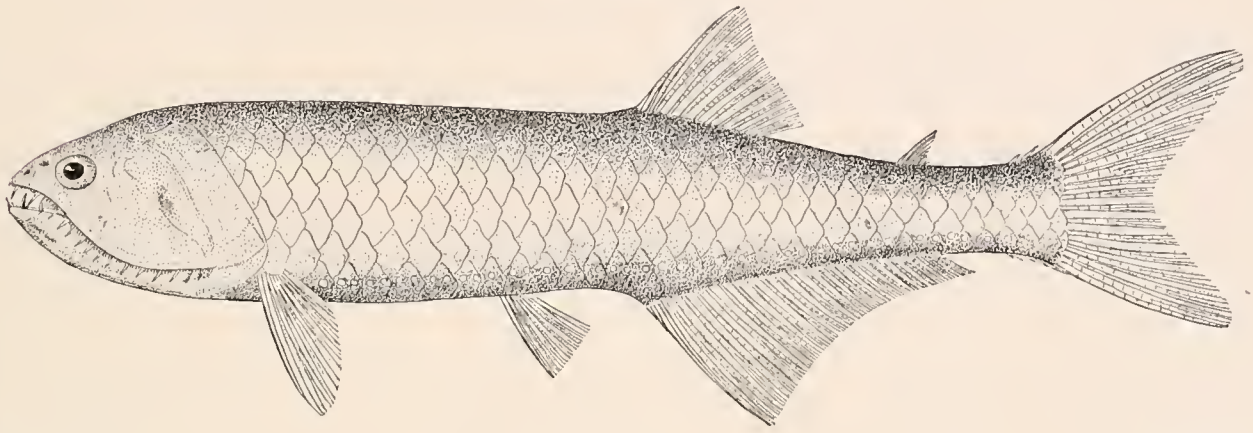

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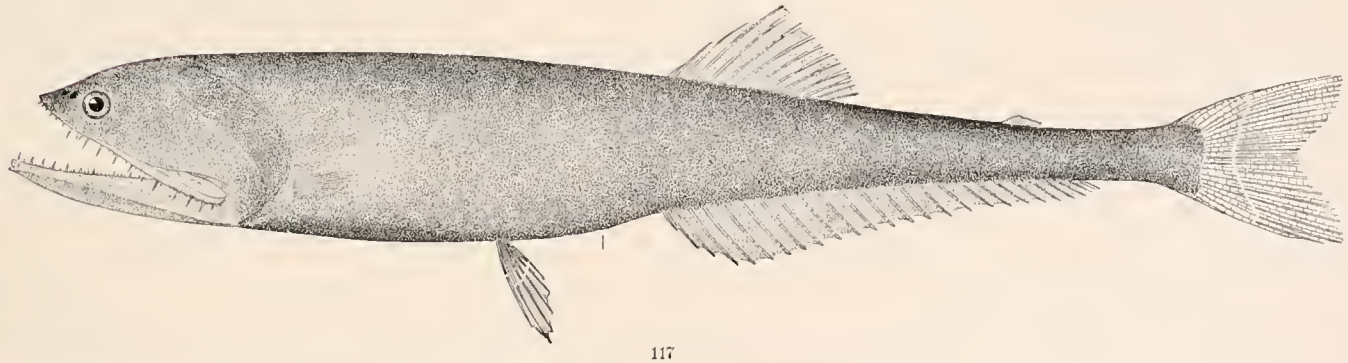

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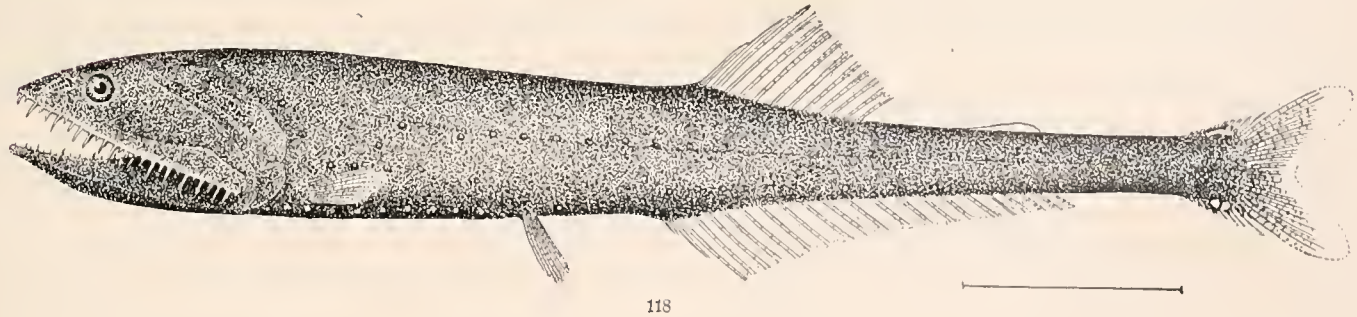
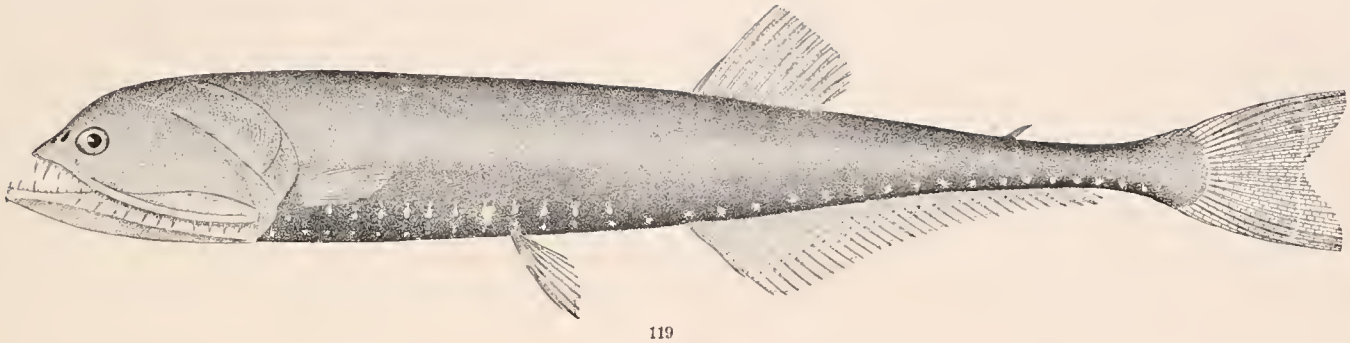


118

115. Chauliodus Sloanii. (p. 96.)
117. Gonostoma brevidens. (p. 98.)

116. Gonostoma denudatum. (p. 98.)
118. Cyclothone bathyphila. (p. 100.)



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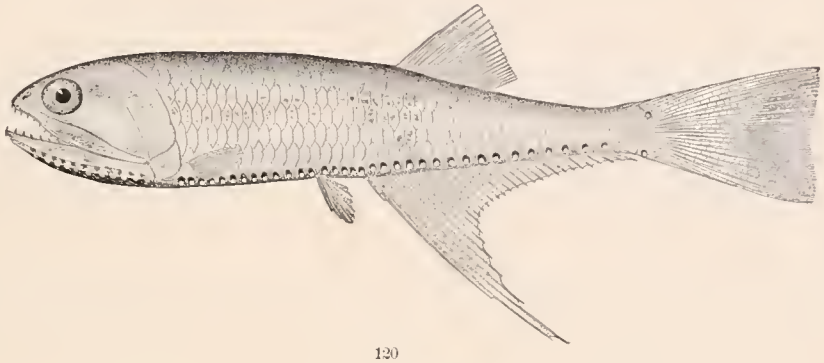

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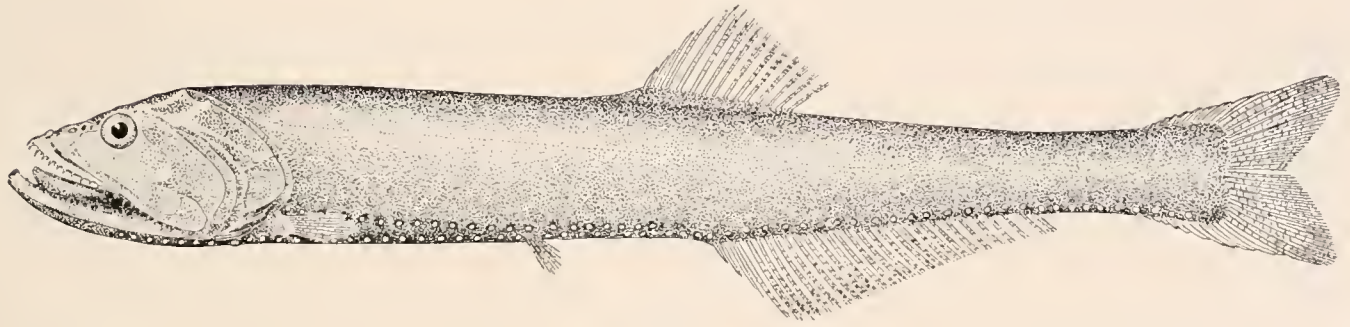

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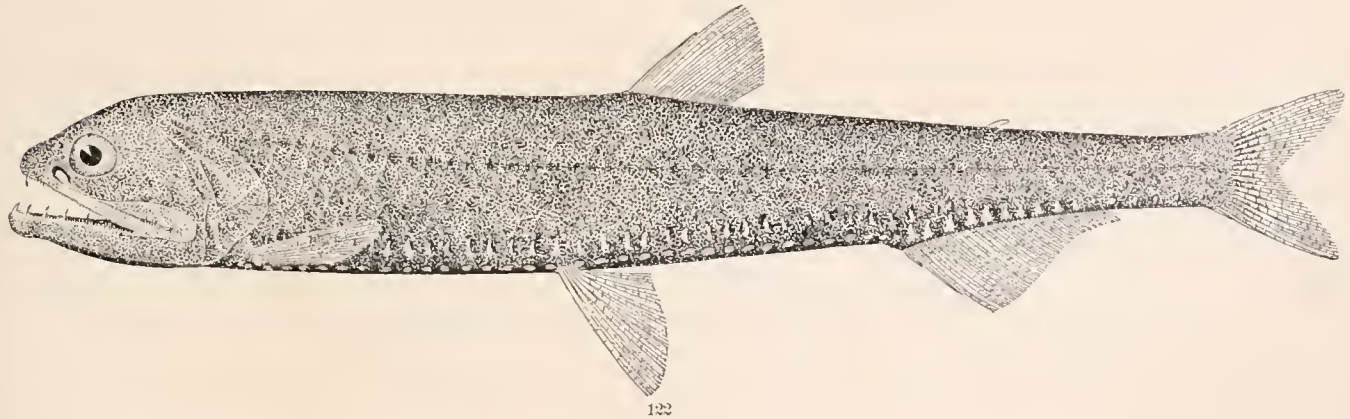
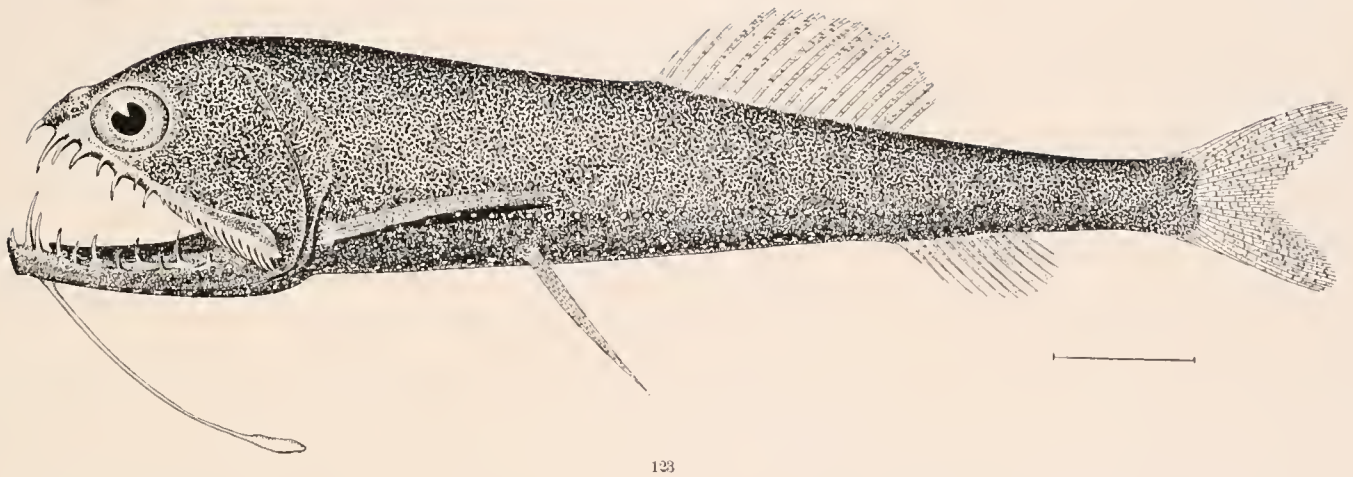


122

119. Cyclothone elongata. (p. 101.)
121. Yarrella Blackfordi. (p. 103.)

120. Bonapartia pedaliota. (p. 102.)
122. Photichthys argenteus. (p. 104.)



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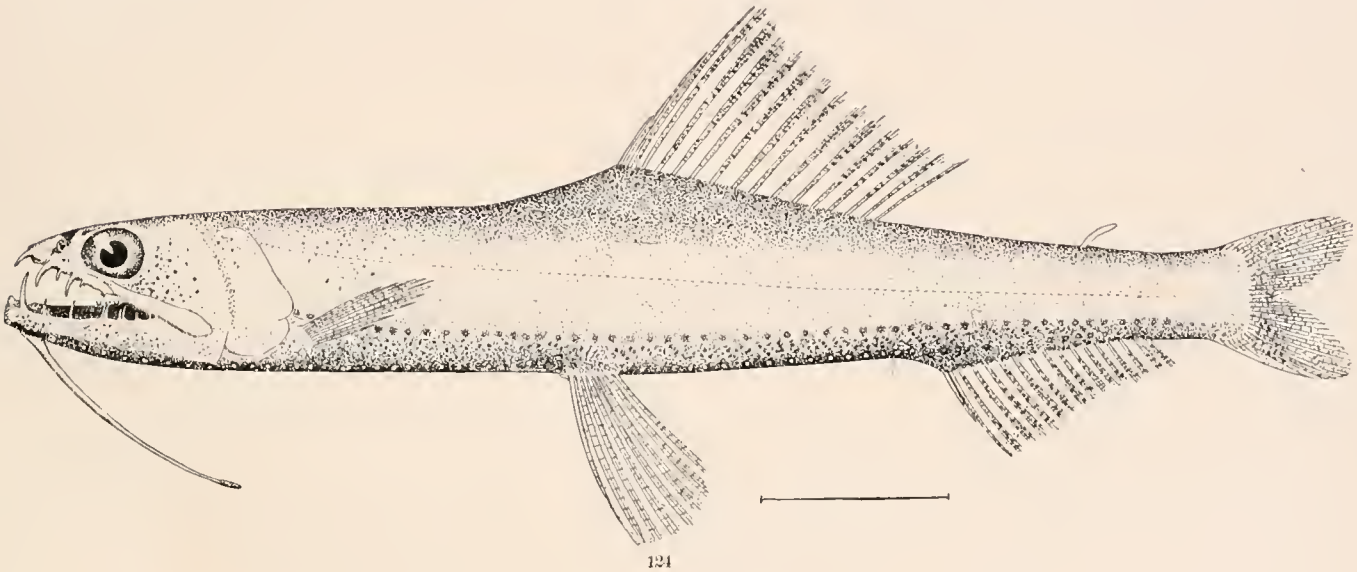

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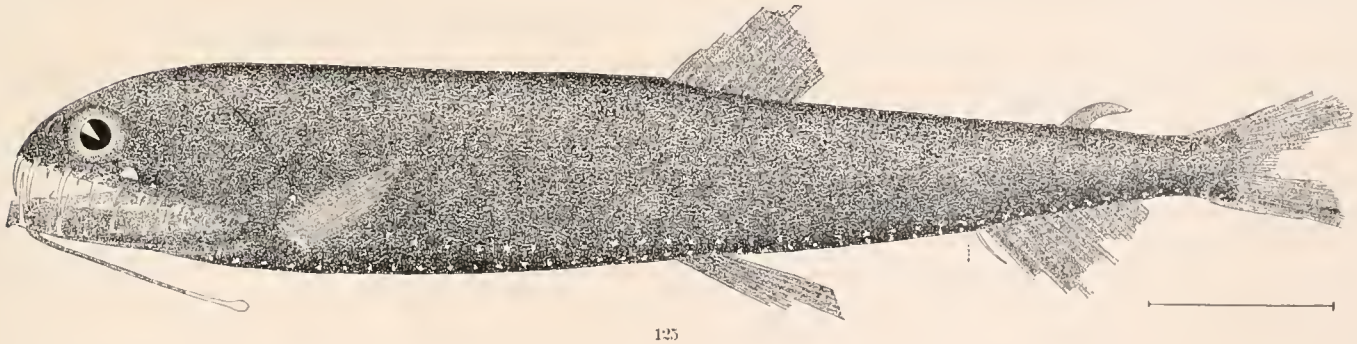
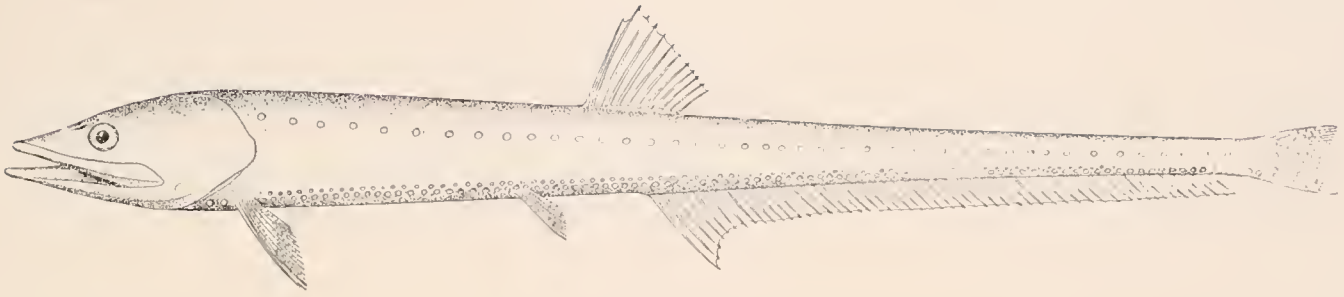


125

123. Astronesthes niger. (p. 105.) 124. Astronesthes gemmifer. (p. 105.) 125. Astronesthes Richardsonii. (p. 106.



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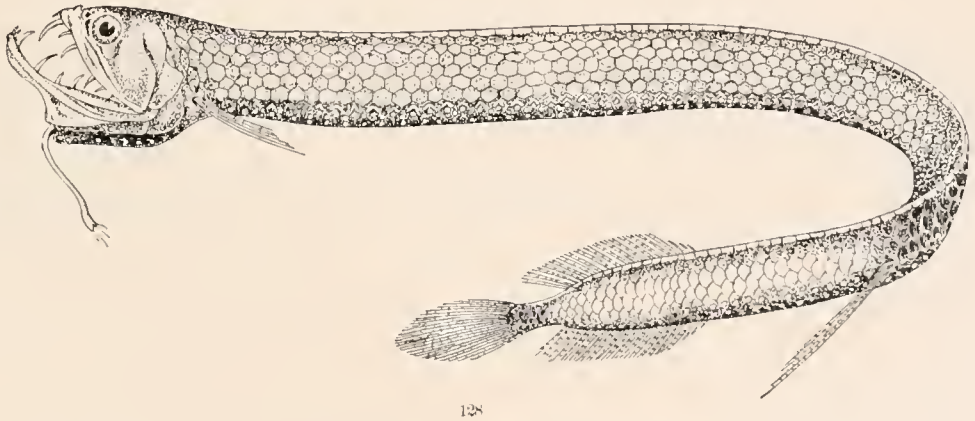
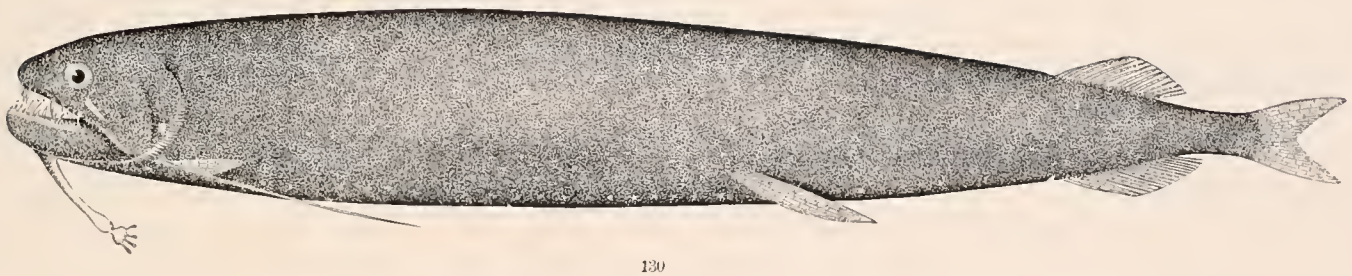


128

129

126. Diplophos tænia. (p. 104.)
128. Stomias boa. (p. 108.)

127. Stomias ferox. (p. 107.)
129. Stomias affinis. (p. 108.)



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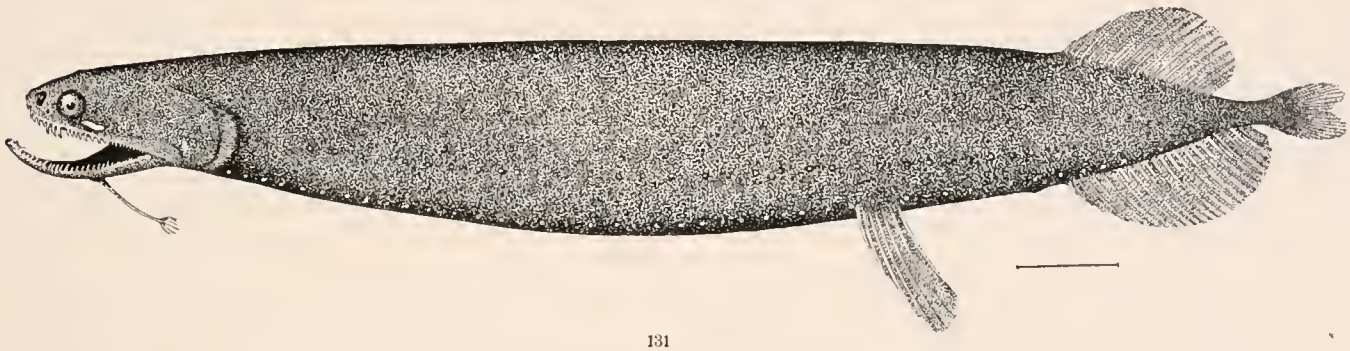

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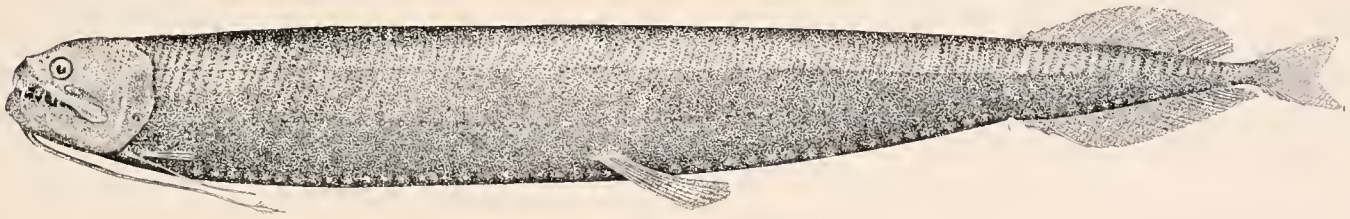

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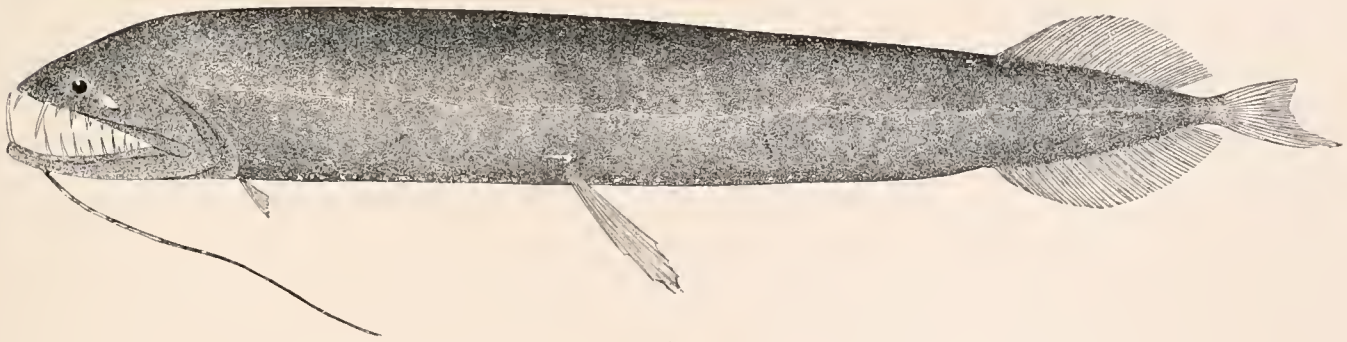
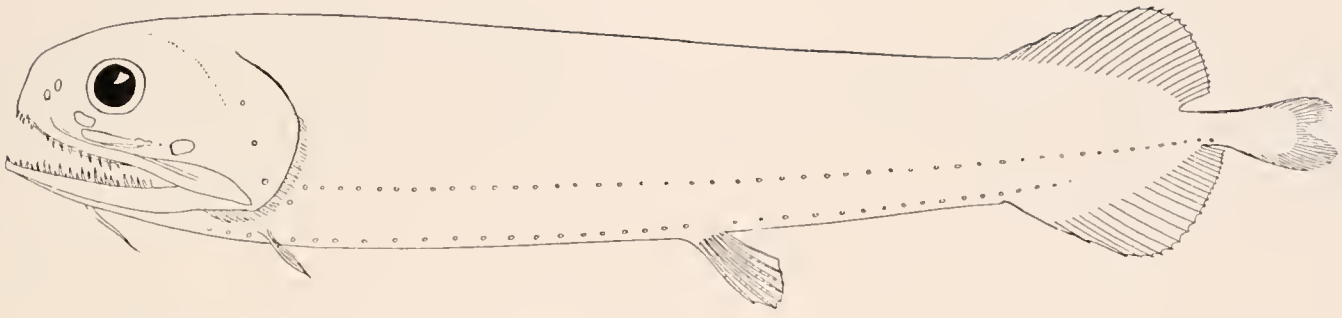


133

130. Echiostoma barbatum. (p. 109.)
131. Echiostoma margarita. (p. 109.)
132. Opostomias micripnus. (p. 110.)
133. Grammatostomias dentatus. (p. 110.)



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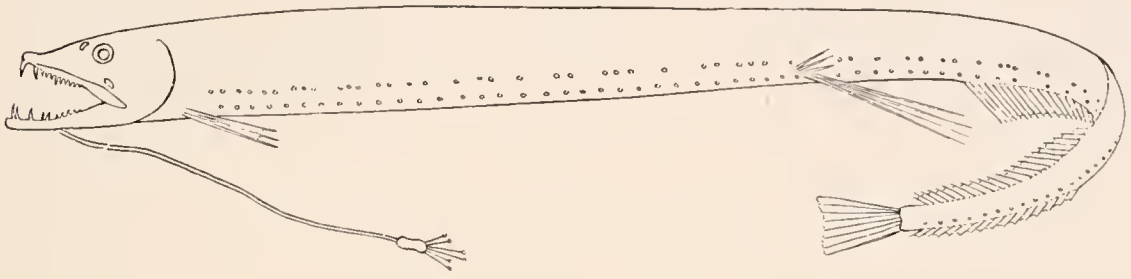


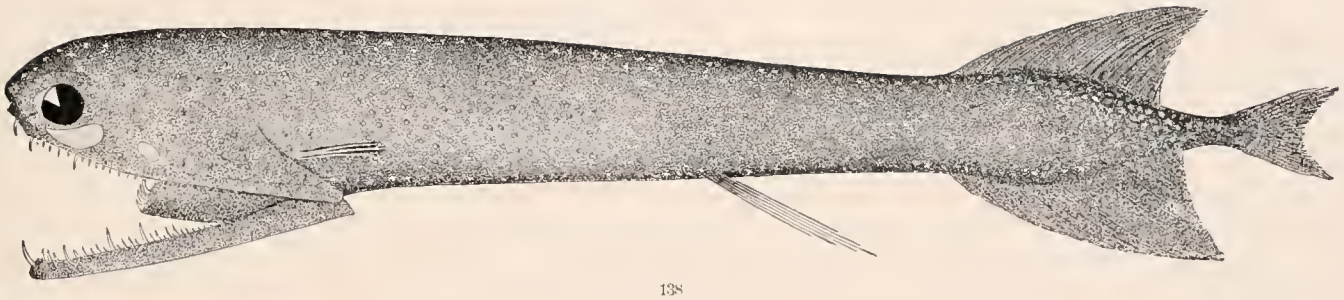
135

136

137

134. Pachystomias microdon. (p. 111.)
136. Bathophilus nigerrimus. (p. 111.)

135. Eustomias obscurus. (p. 111.)
137. Photonectes gracilis. (p. 112.)



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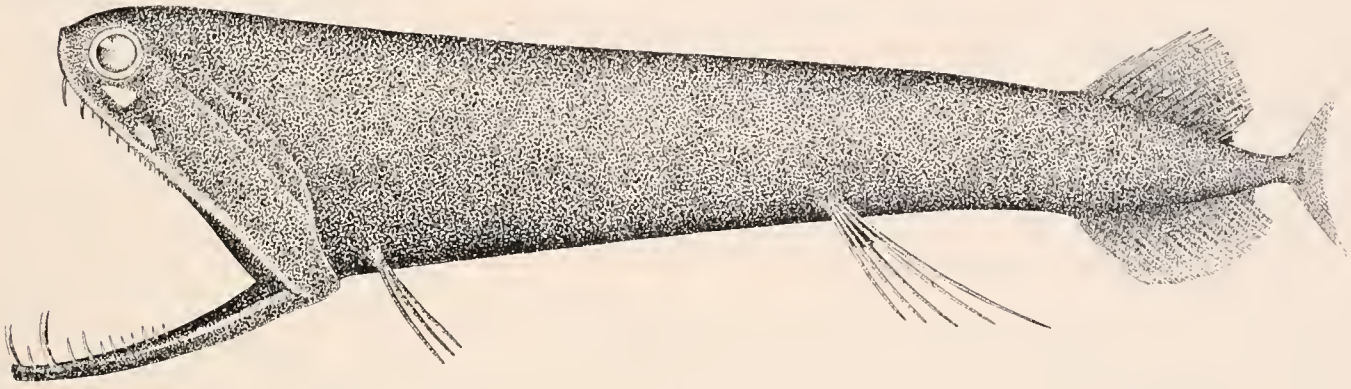

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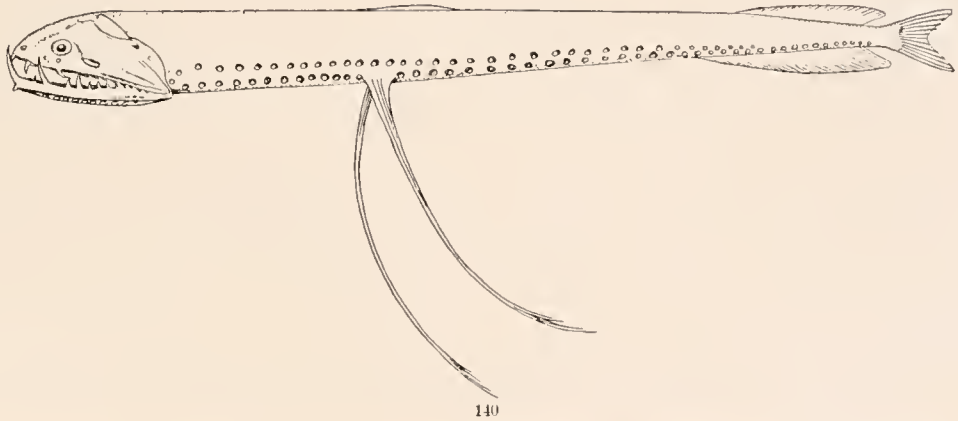

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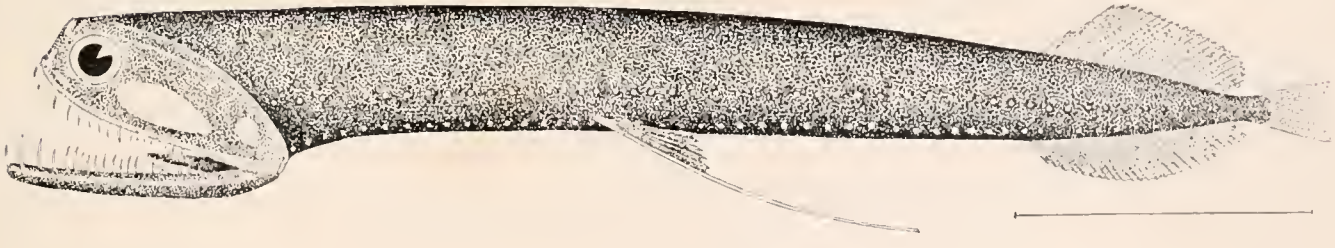
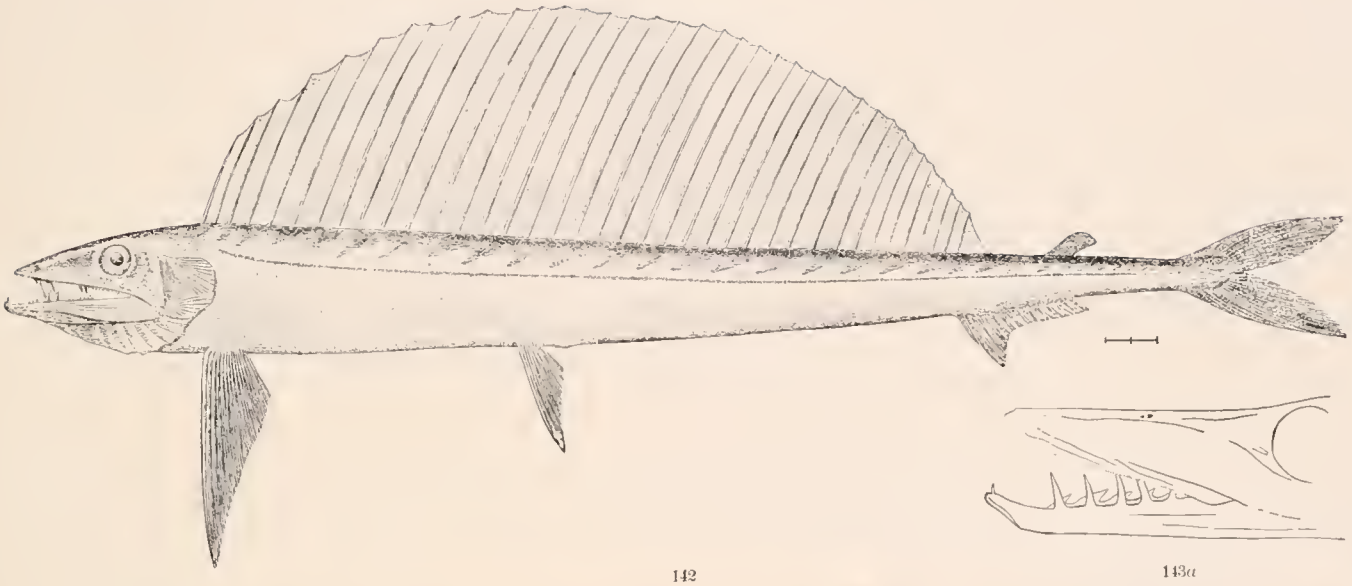


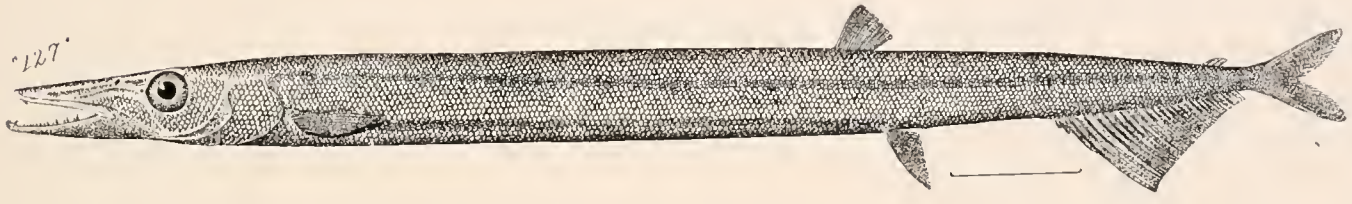
141

138. Malacosteus niger. (p. 114.)
140. Photostomias Guernei. (p. 115.)

139. Malacosteus choristodactylus. (p. 114.)
141. Thaumatostomias atron. (p. 115.)



142 143*a*



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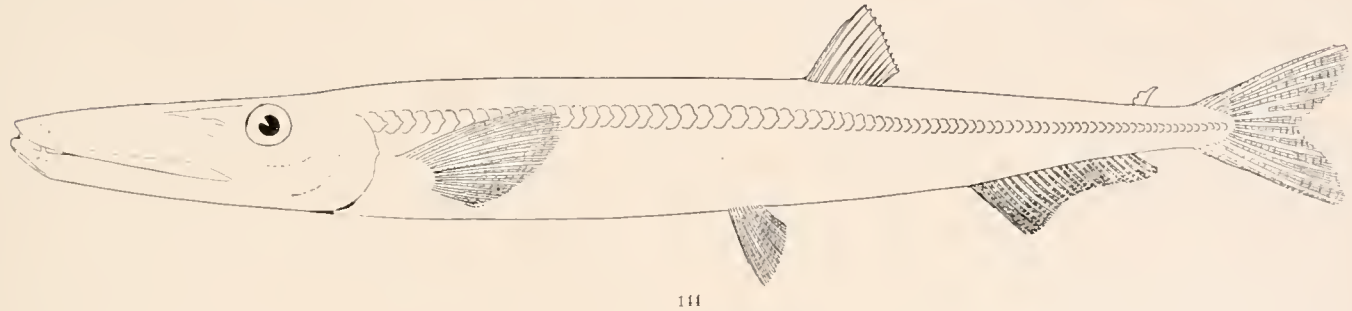

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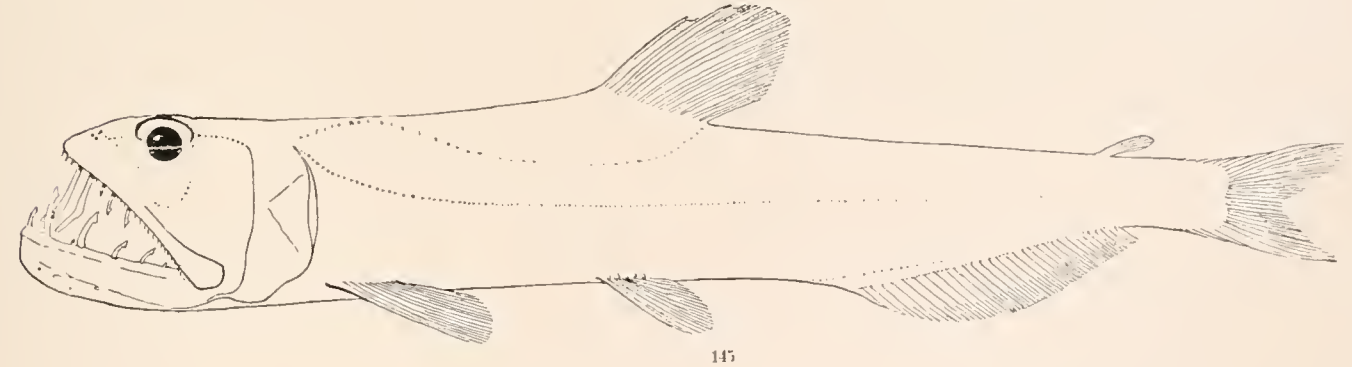
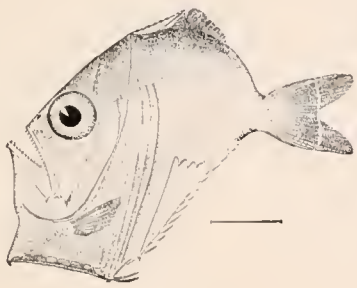


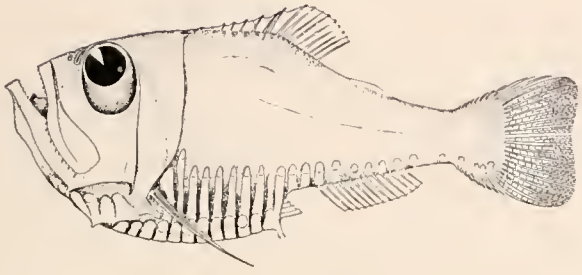
145

142. Alepisaurus ferox. (p. 117.)
143*a*. Paralepis coregonoides. (p. 119.)
143 Paralepis borealis. (p. 119.)
144. Scopelus hyalina. (p. 121.)
145. Odontostomus hyalinus. (p. 121.)



146

146*b*



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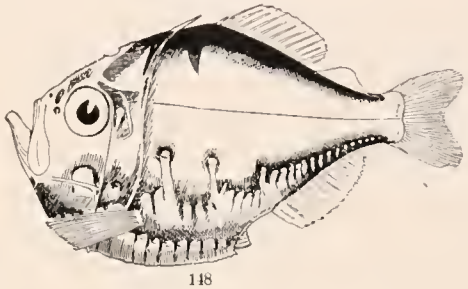

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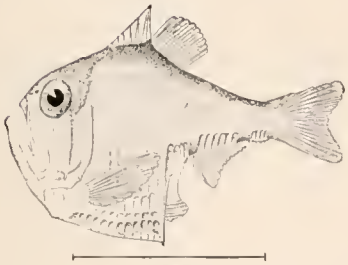
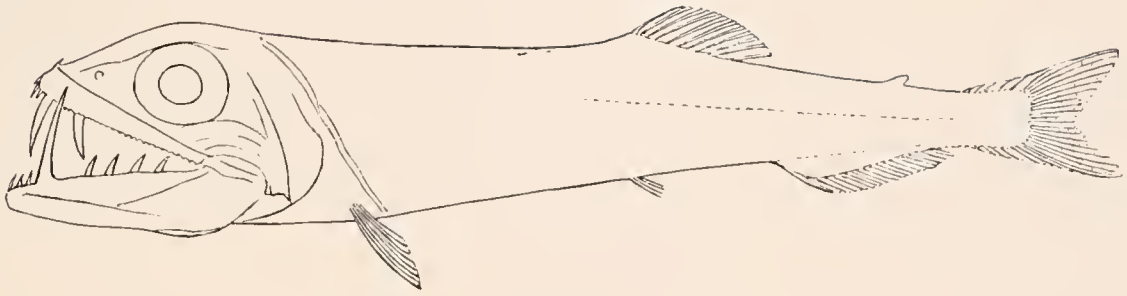


148*a*

149

146, 146*b*. Sternoptyx diaphana. (p. 124.)
148. Polyipnus spinosus. (p. 128.)
149. Paralepis coregonoides. (p. 119.)

147. Argyropelecus hemigymnus. (p. 126.)
148*a*. Argyropelecus Olfersii. (p. 126.)



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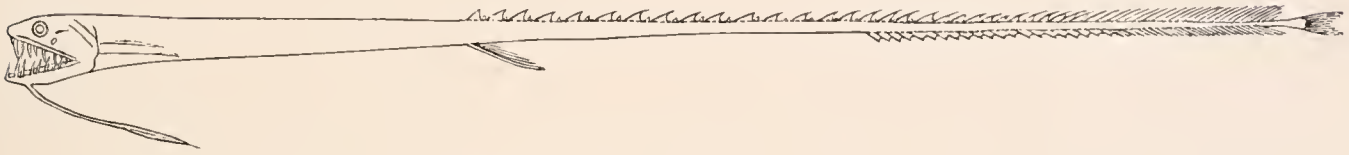

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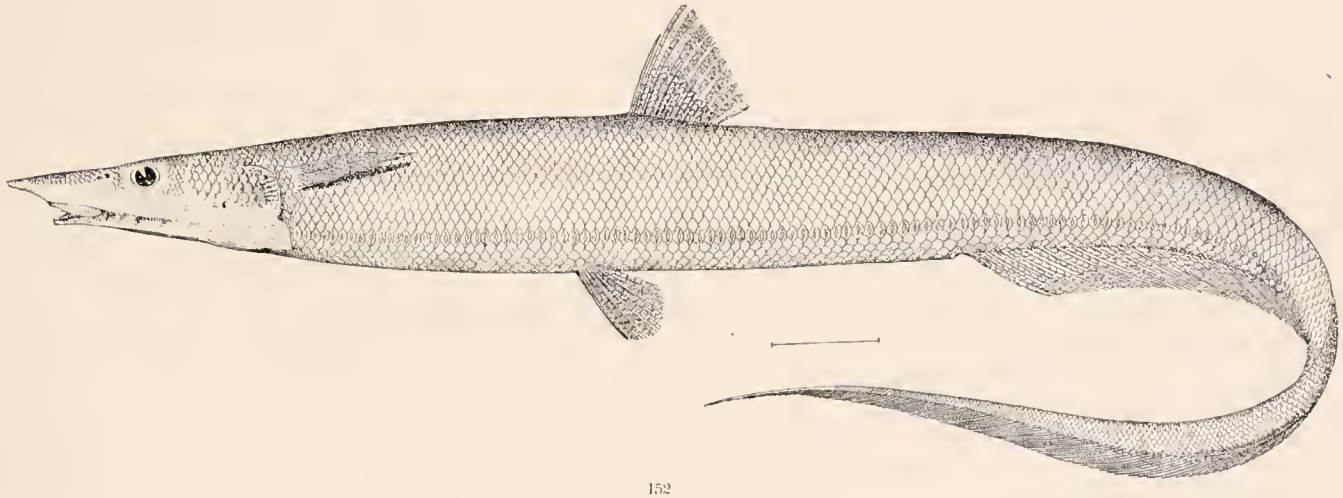
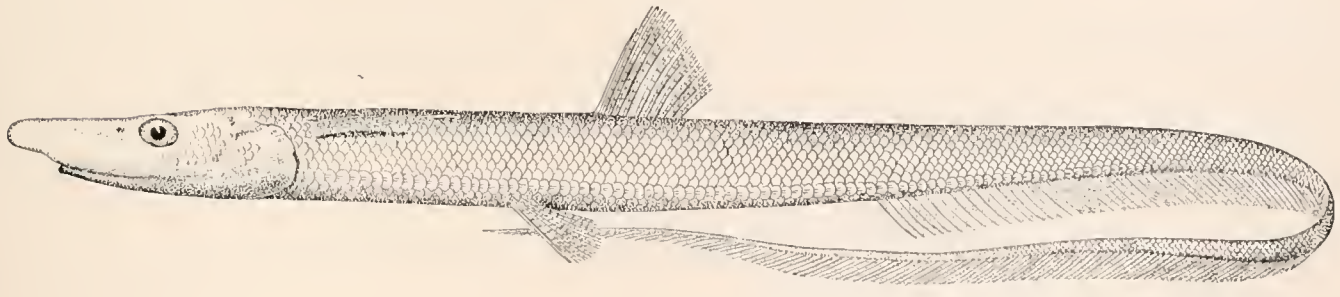


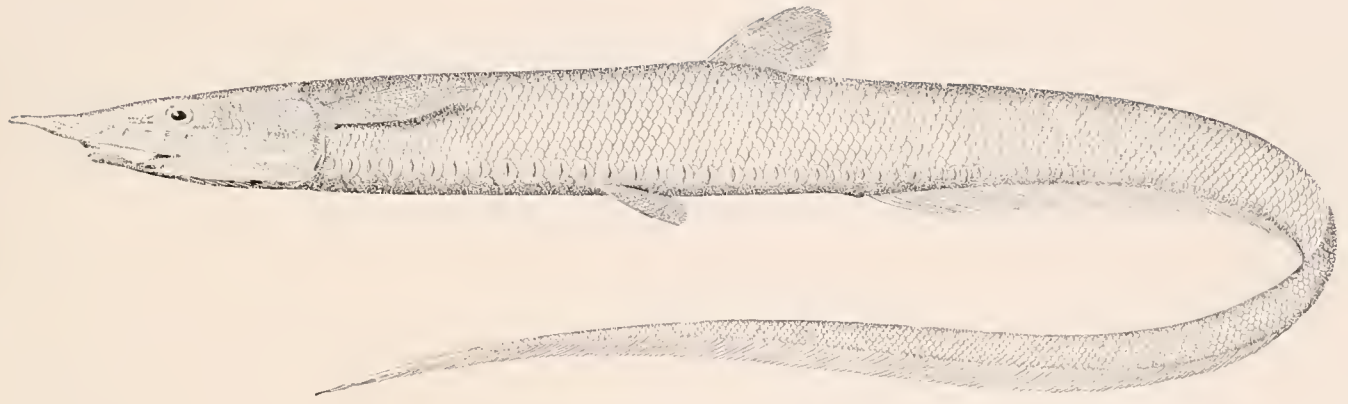
152



153

150. Omosudis Lowii. (p. 122.)
152. Halosaurus Oweni. (p. 130.)

151. Idiacanthus ferox. (p. 129.)
153. Halosaurus Johnsonianus. (p. 131.)



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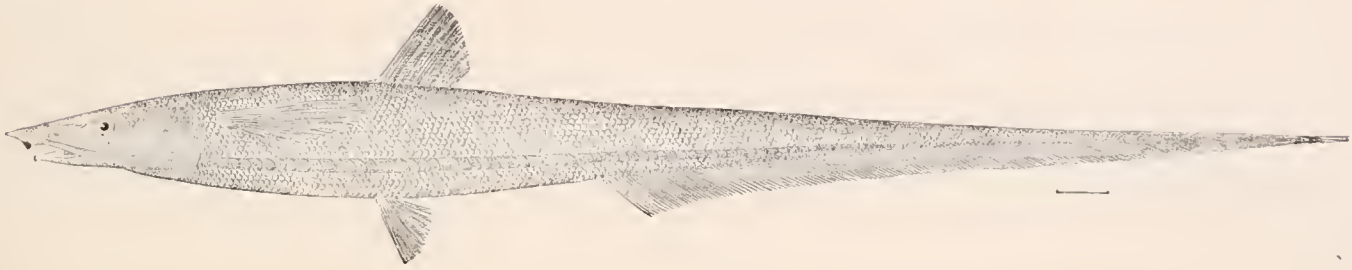
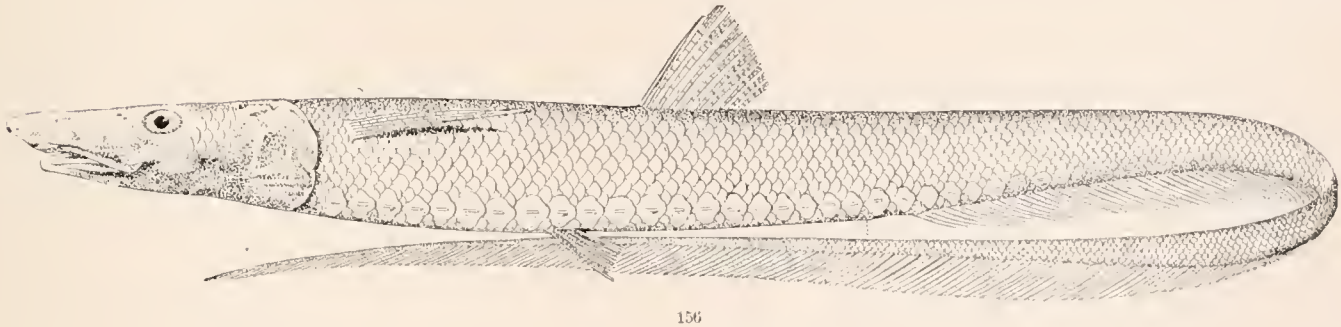


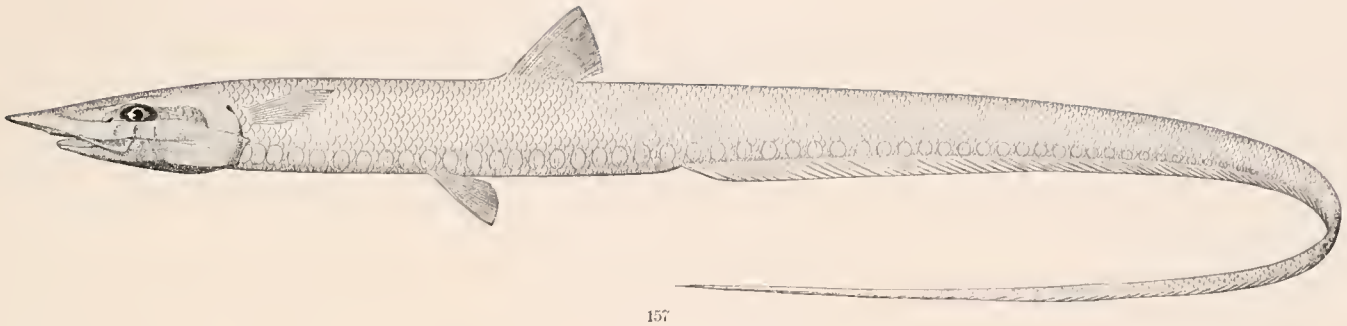
155

155*a*



156

154. ALDROVANDIA ROSTRATA. (p. 132.)
155, 155*a*. ALDROVANDIA MACROCHIRA. (p. 133.)
156. ALDROVANDIA PHALACRUS. (p. 134.)



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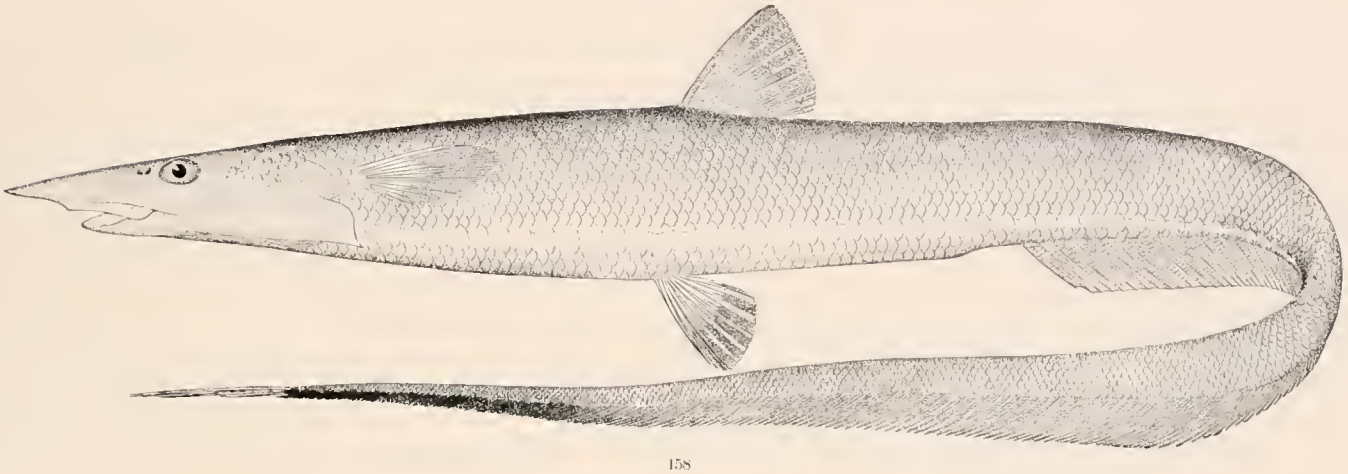
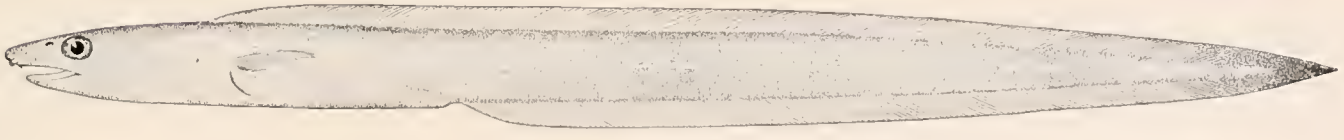


158



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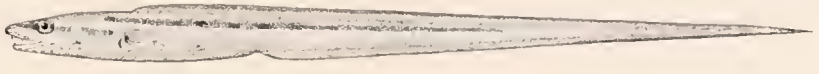
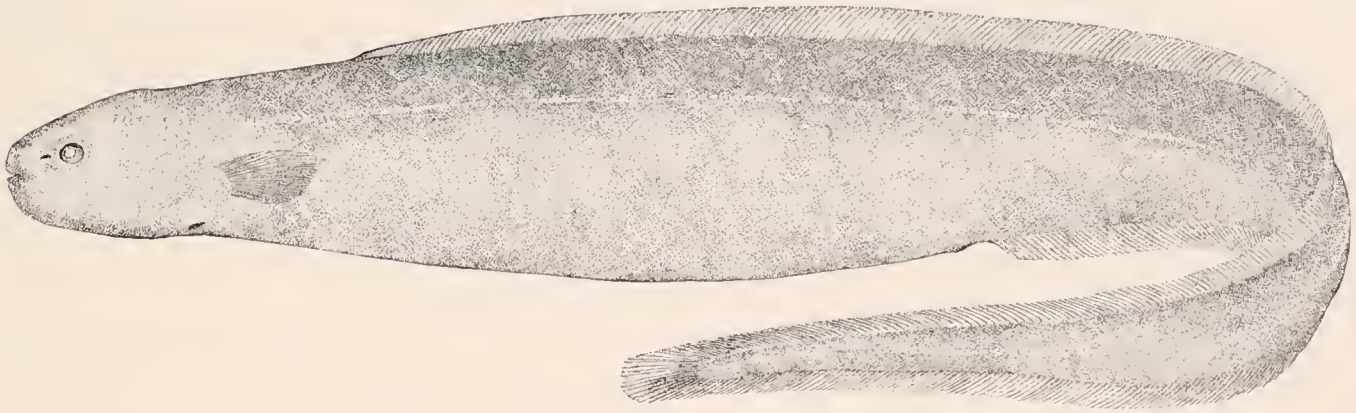


160

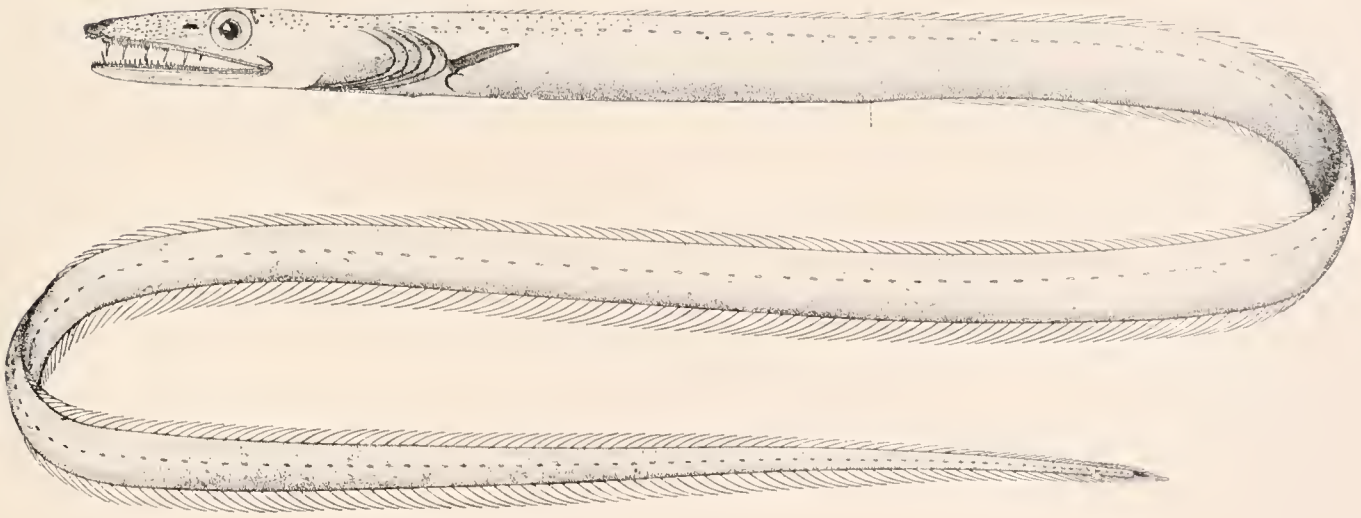
157. Aldrovandia gracilis. (p. 134.)
159. Congermuræna flava. (p. 138.)

158. Aldrovandia pallida. (p. 135.)
160. Urocongeр vicinus. (p. 138.)



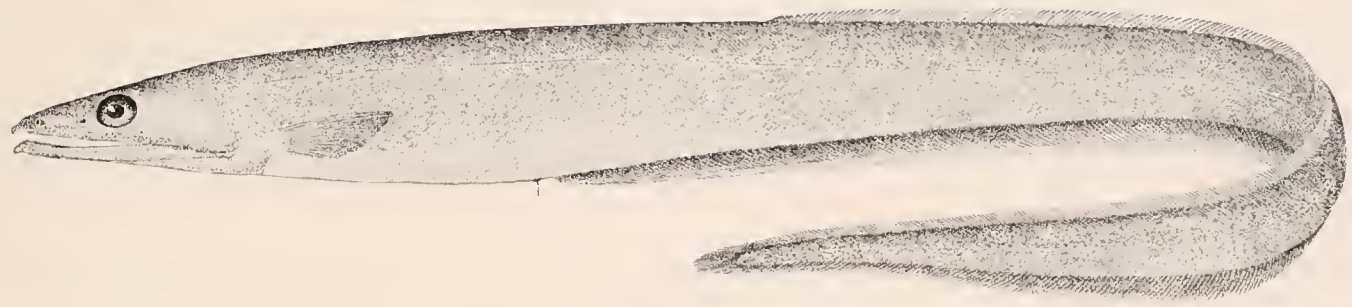
161

162



163

161. Simenchelys parasiticus. (p. 139.)
162. Ilyophis brunneus. (p. 141.)
163. Hoplunnis diomedianus. (p. 146.)



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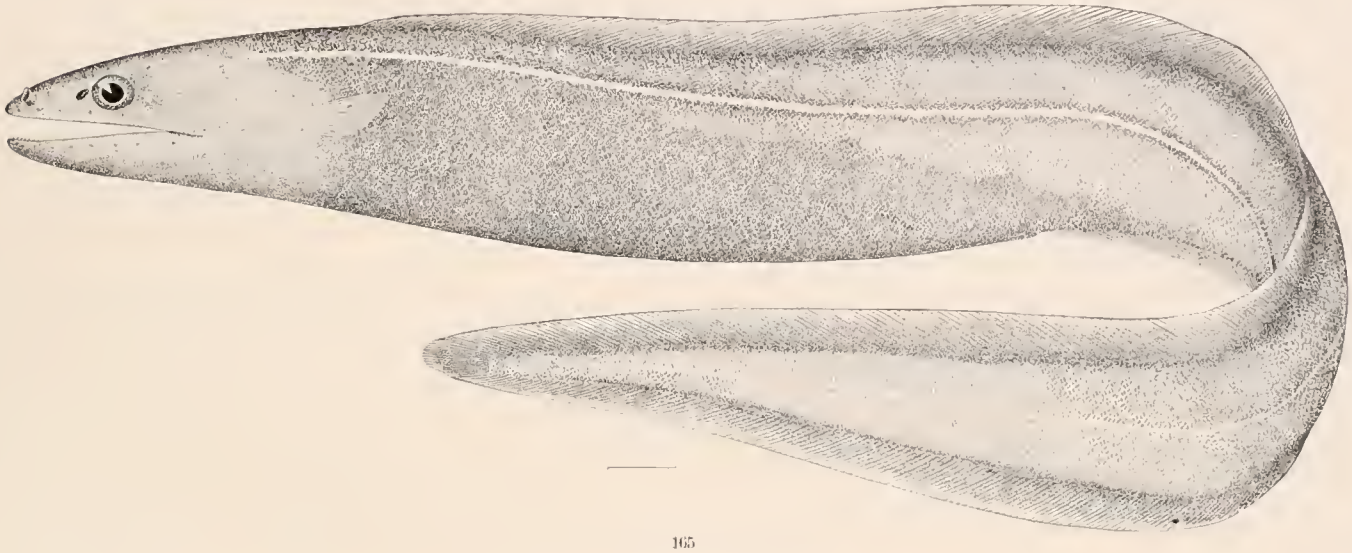

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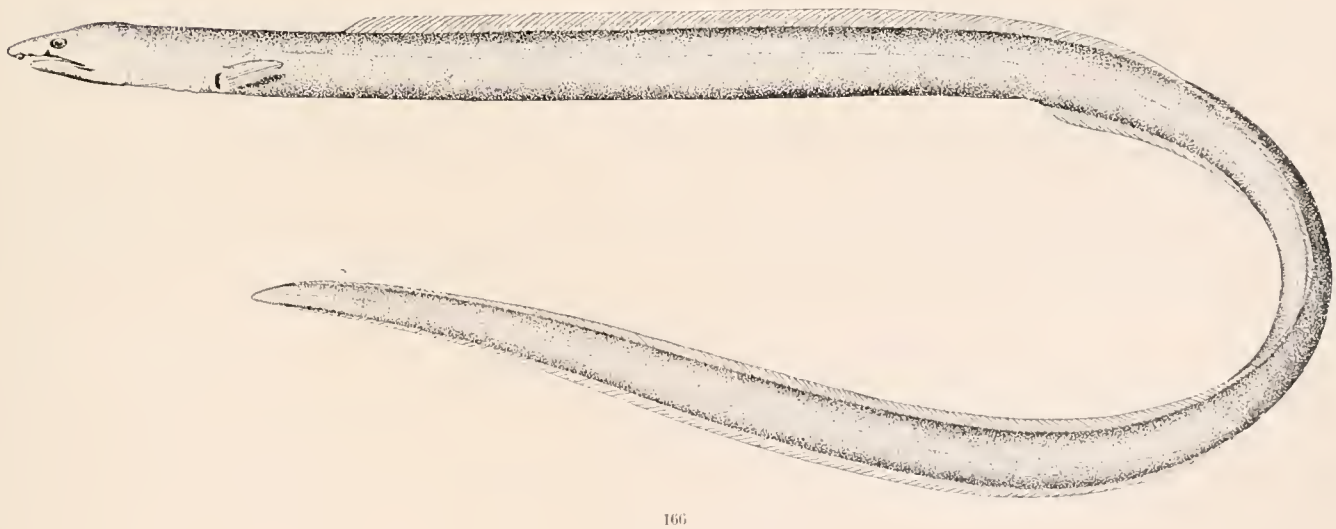
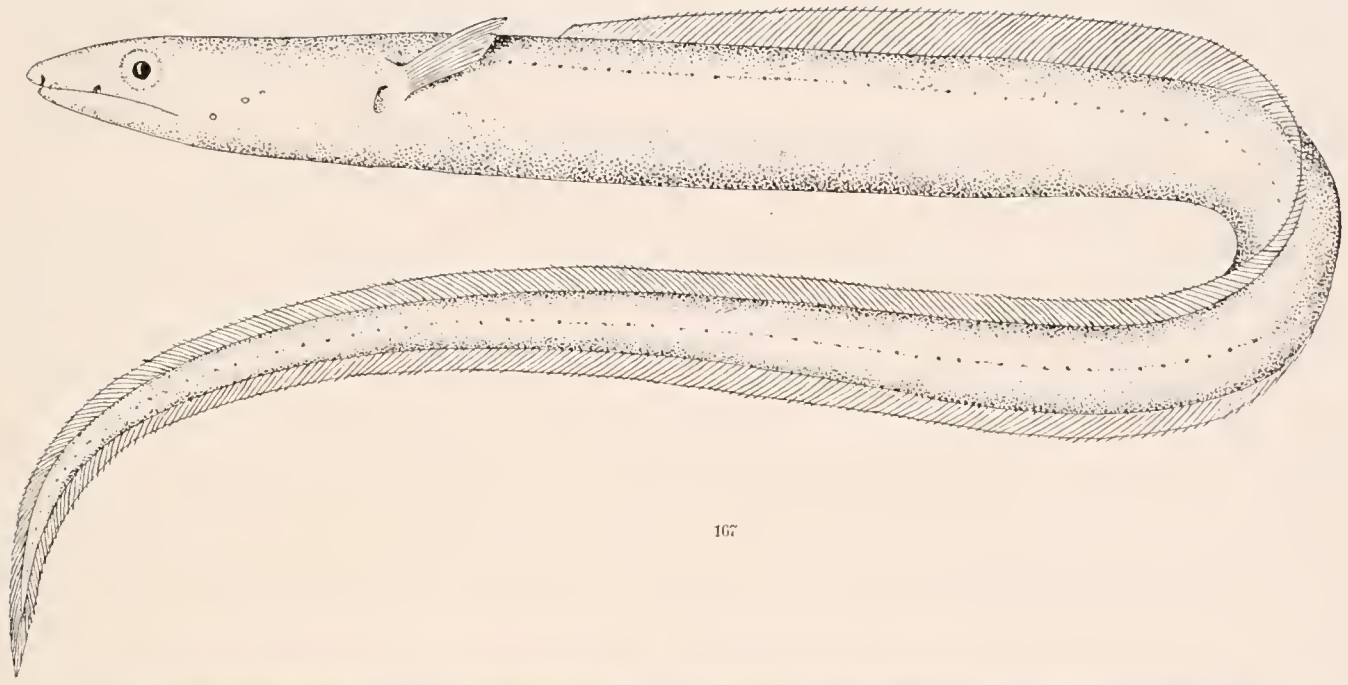


166

164. Synaphobranchus pinnatus. (p. 143.)
165. Histiobranchus infernalis. (p. 115.)
166. Pisoodonophis cruentifer. (p. 117.)



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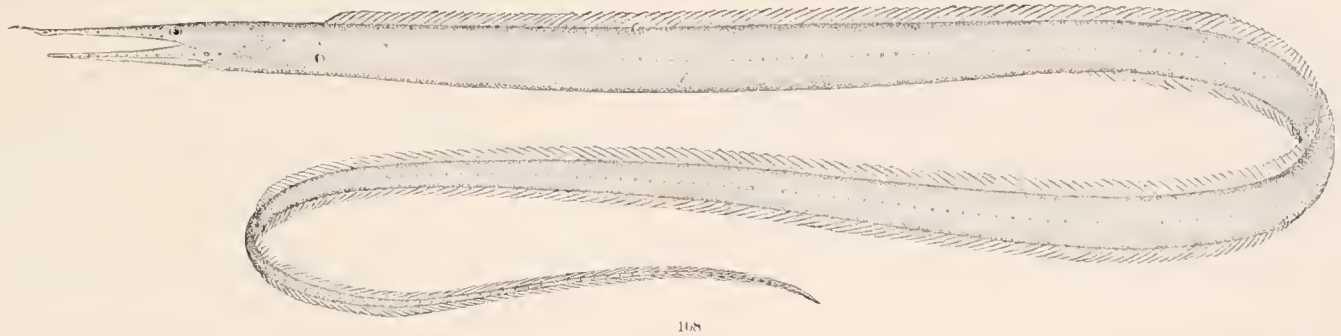
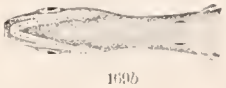


168

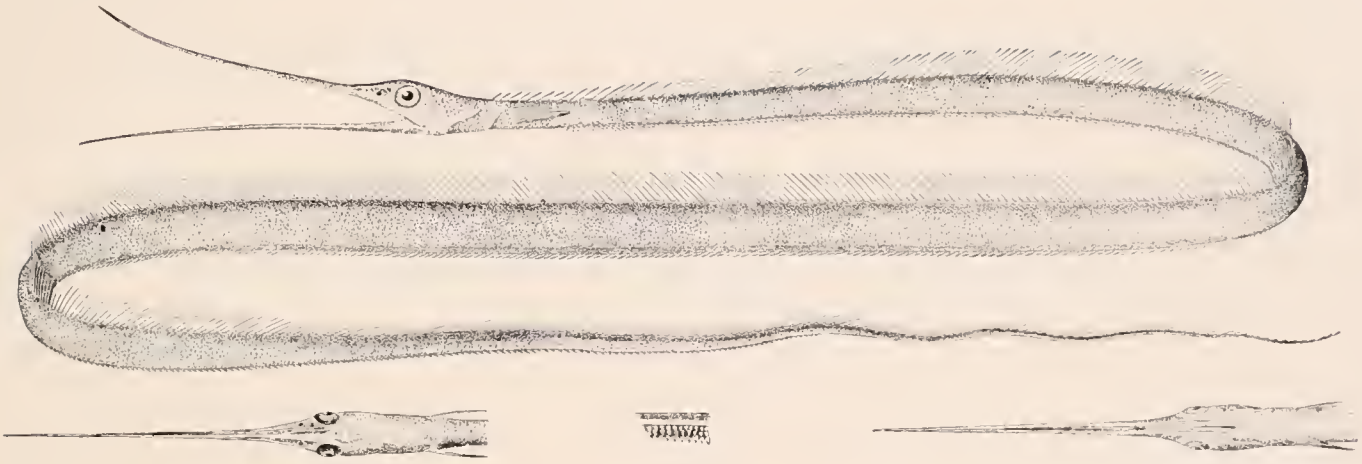
169*a*



169*b*

169

167. Myrus pachyrhynchus. (p. 148.) 168. Venefica procera. (p. 149.)
169, 169*a*, *b*. Derichthys serpentinus. (p. 161.)



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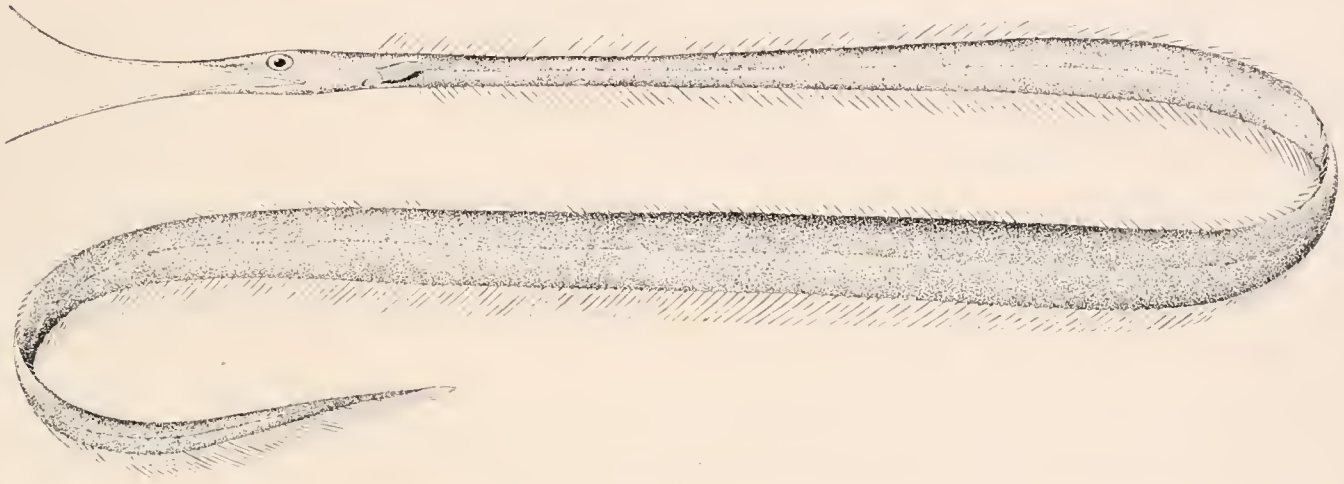

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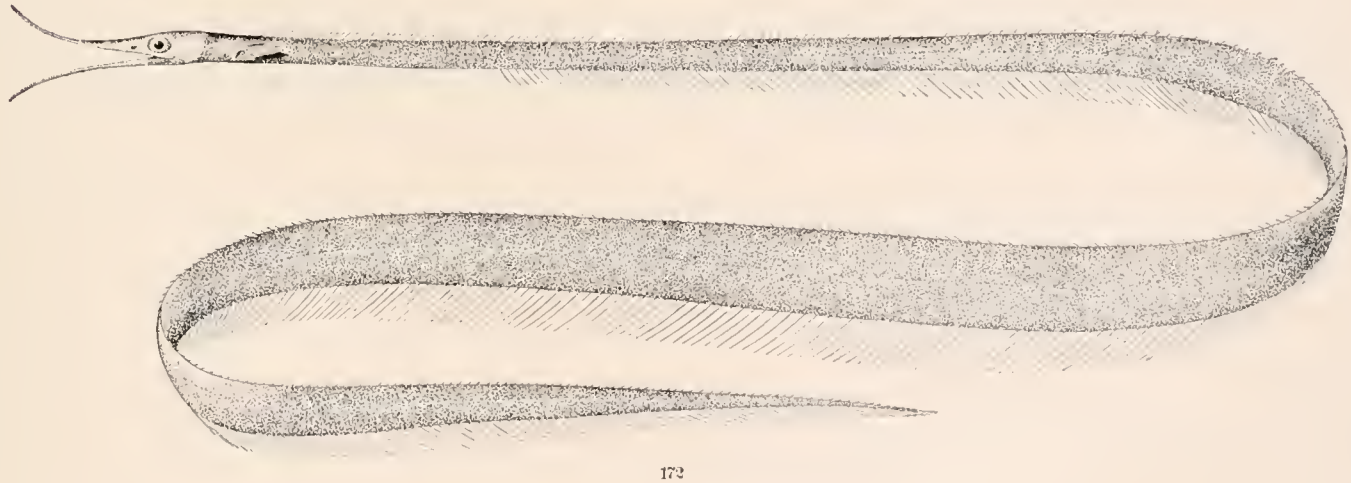
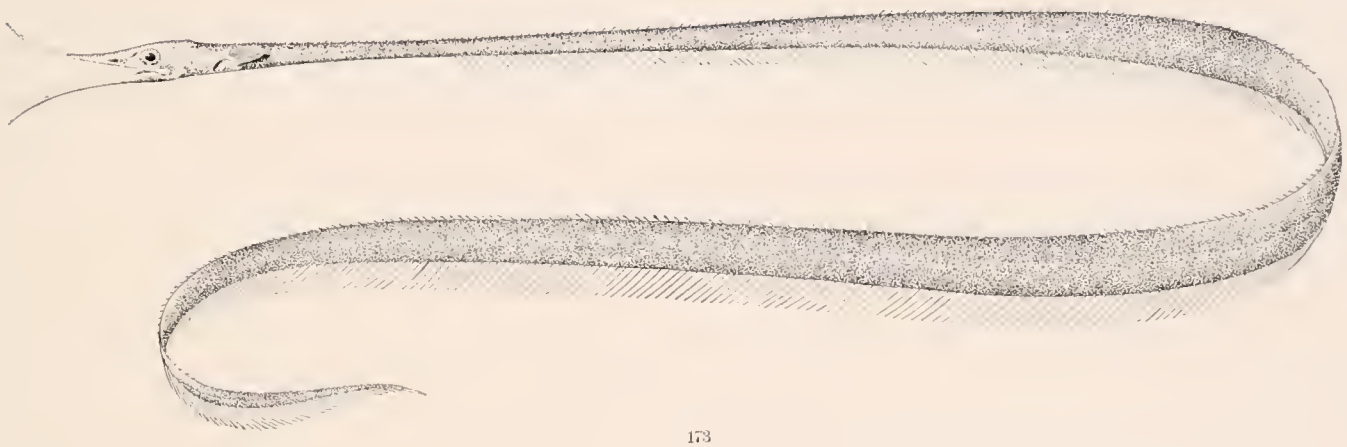


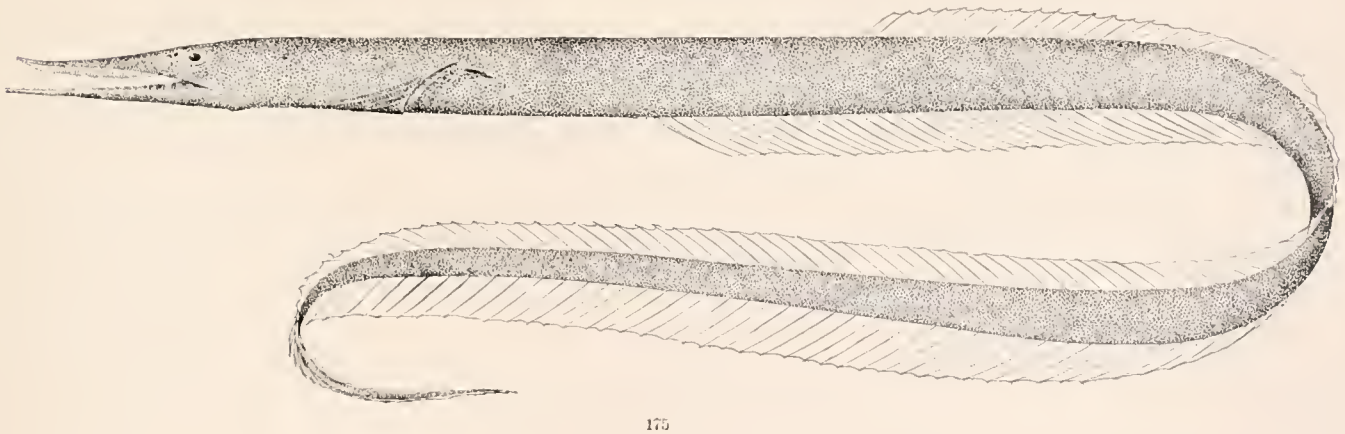
172

170. Nemichthys scolopaceus. (p. 152.) 171. Labichthys carinatus. (p. 153.)
172. Labichthys elongatus. (p. 153.)



173

174



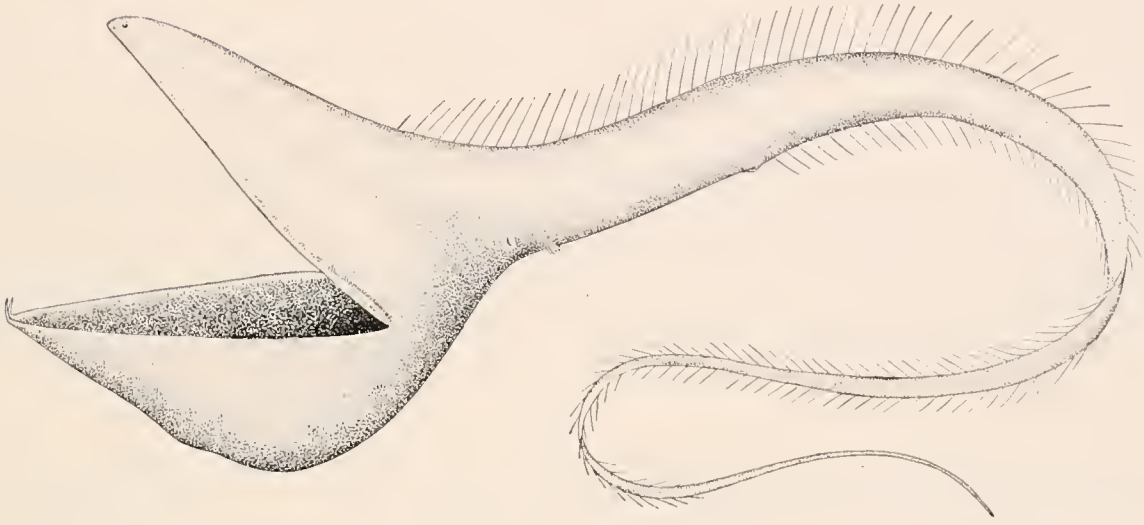
175

173. Labichthys infans. (p. 153.)

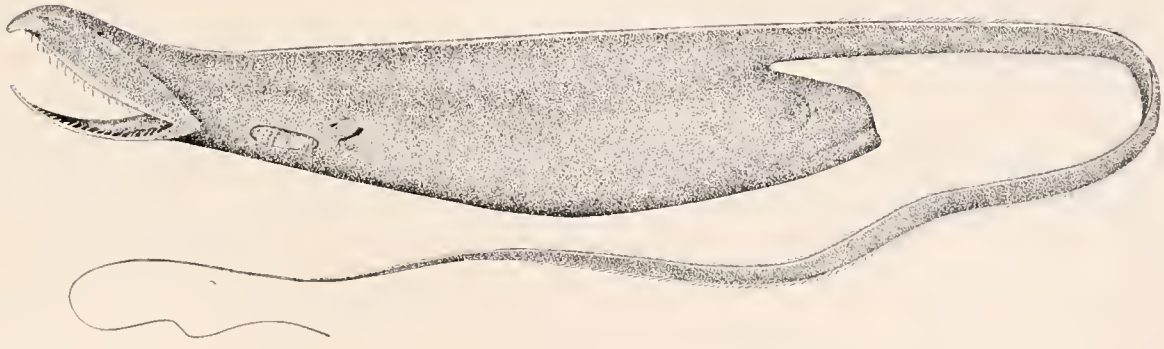
174. Labichthys infans (after Günther). (p. 153.)

175. Serrivomer Beanii. (p. 155.)

176

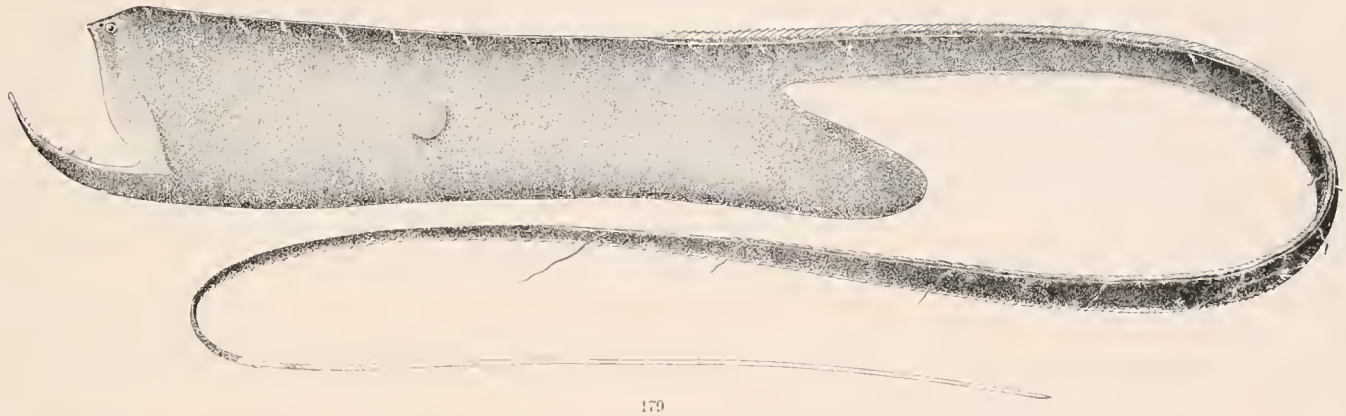


177



178

176. CYEMA ATRUM. (p. 154.) 177. EURYPHARYNX PELECANOIDES. (p. 157.)
178. SACCOPHARYNX FLAGELLUM. (p. 159.)



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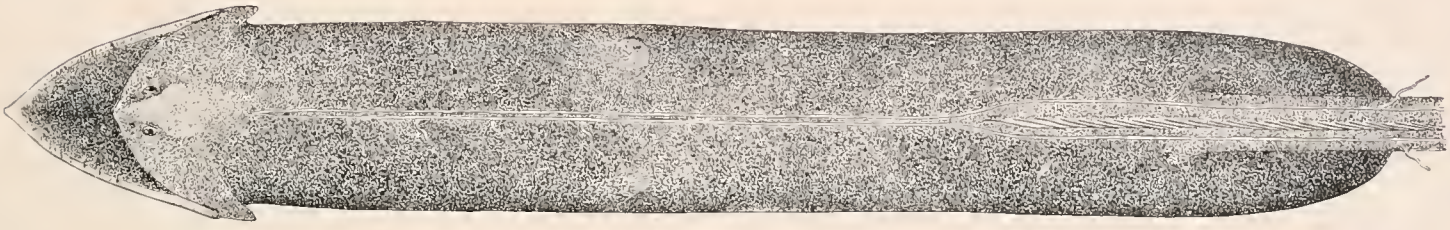

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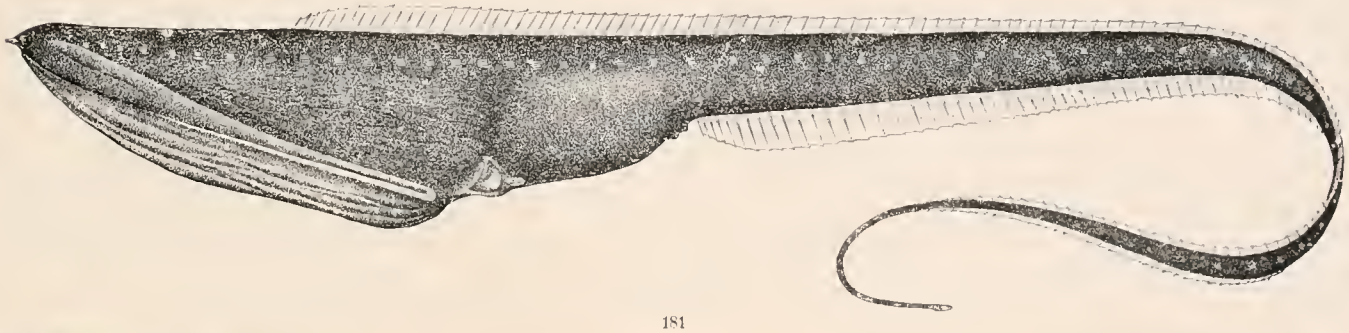
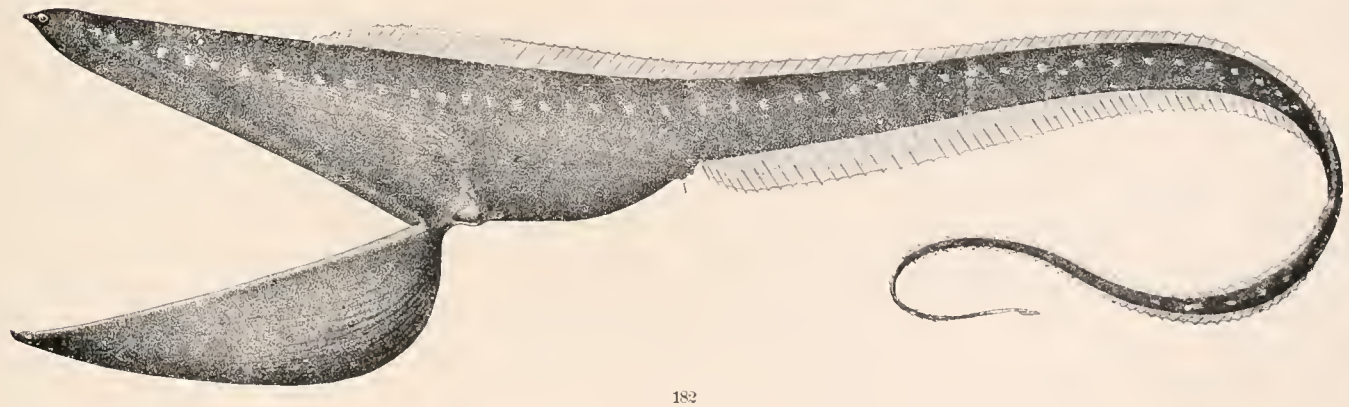


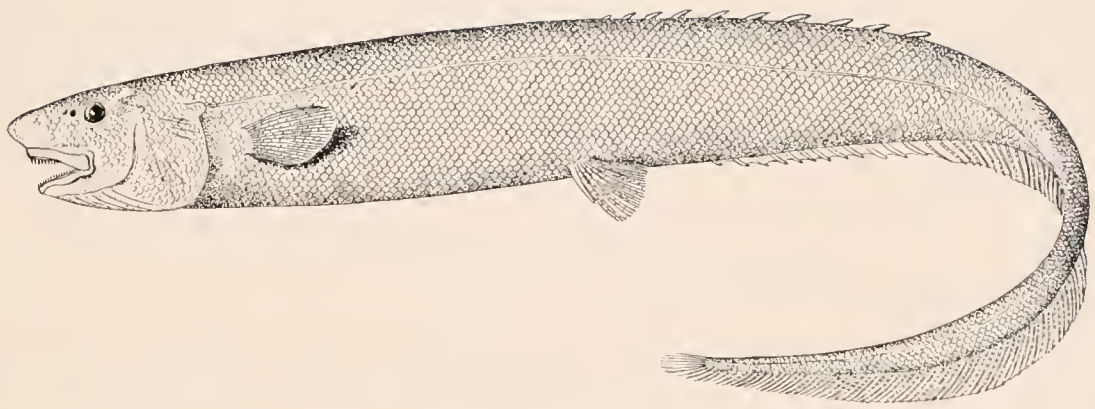
181



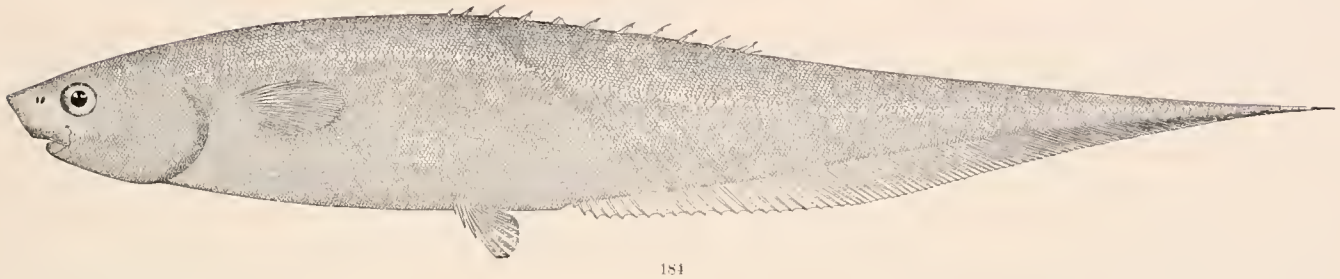
182

179, 180. Saccopharynx flagellum. (p. 157.)

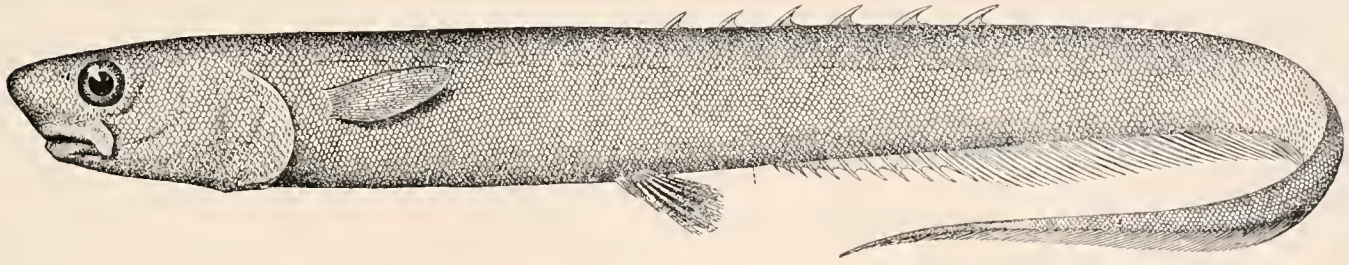
181, 182. Gastrostomus Bairdii. (p. 159.)



183



184



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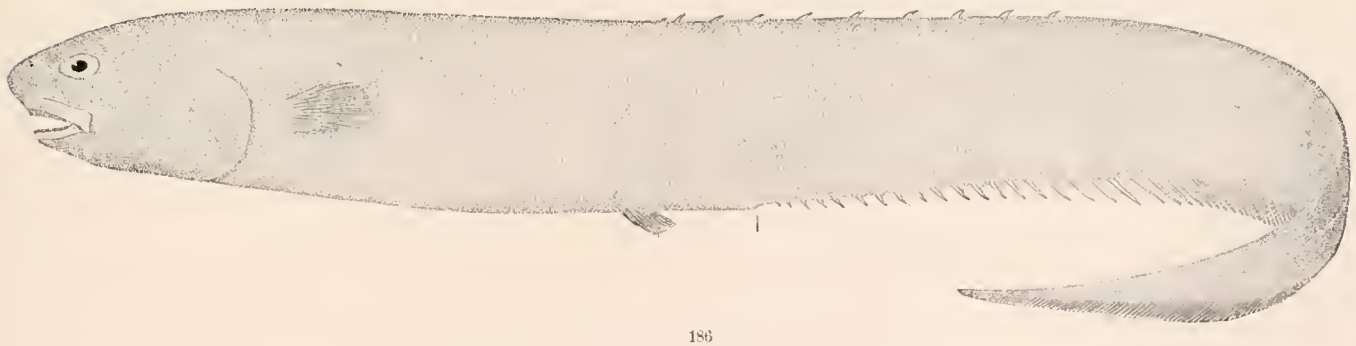
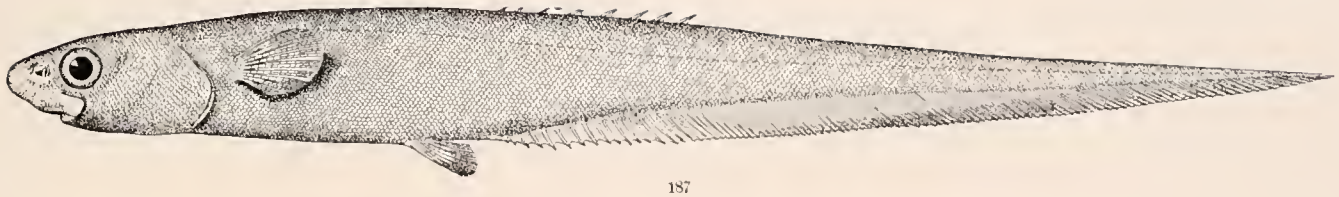


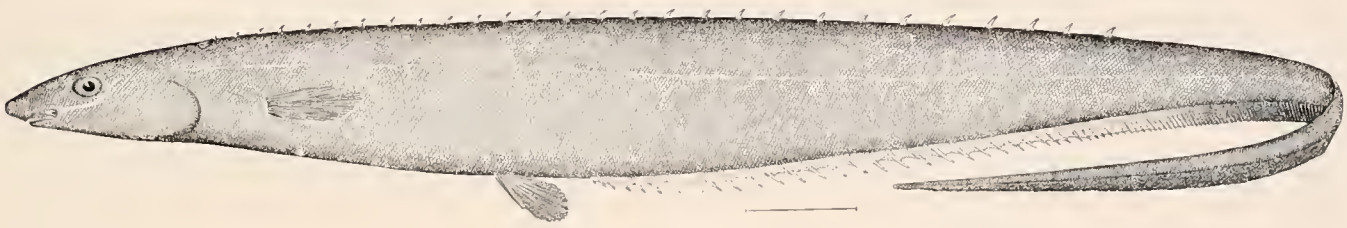
186

183. Notacanthus nasus. (p. 164.)
184. Notacanthus analis. (p. 165.)
185. Notacanthus Bonapartii. (p. 166.)
186. Notacanthus phasganorus. (p. 167.)

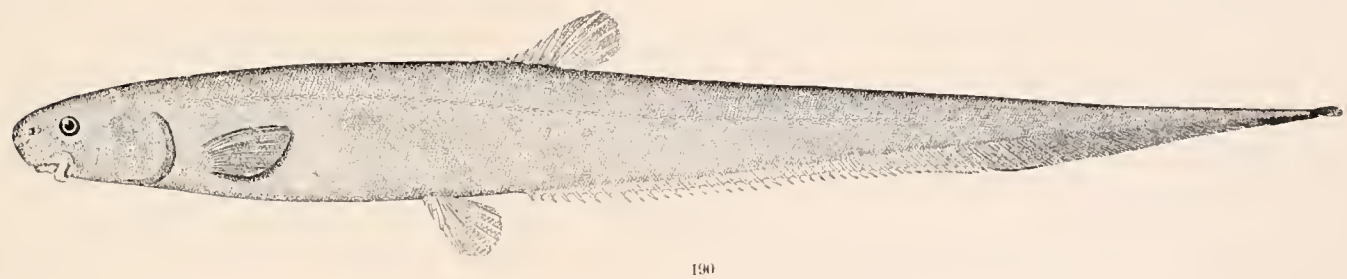


187

188



189

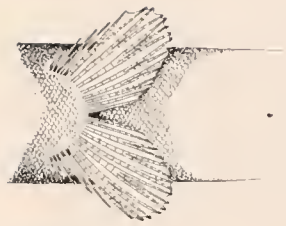


190

187. Gigliolia Moseleyi. (p. 169.)
189. Macdonaldia rostrata. (p. 171.)

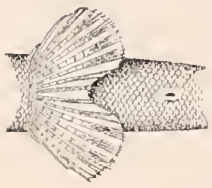
188. Polyacanthonotus rissoanus. (p. 170.)
190. Lipogenys Gillii. (p. 173.)

191*a*.

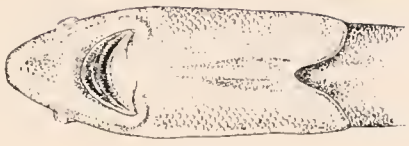


191*b*.

192*a*.

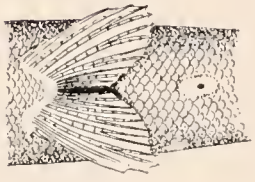


192*b*.



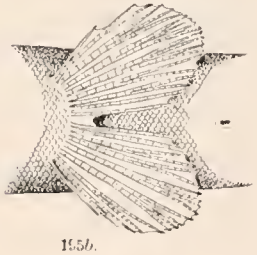
193

193*a*.

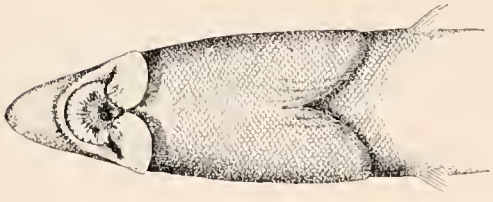


194*b*

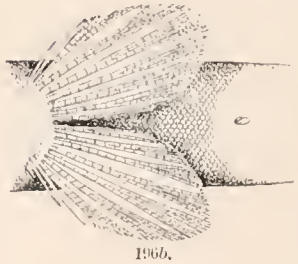
195*a*.



195*b*.



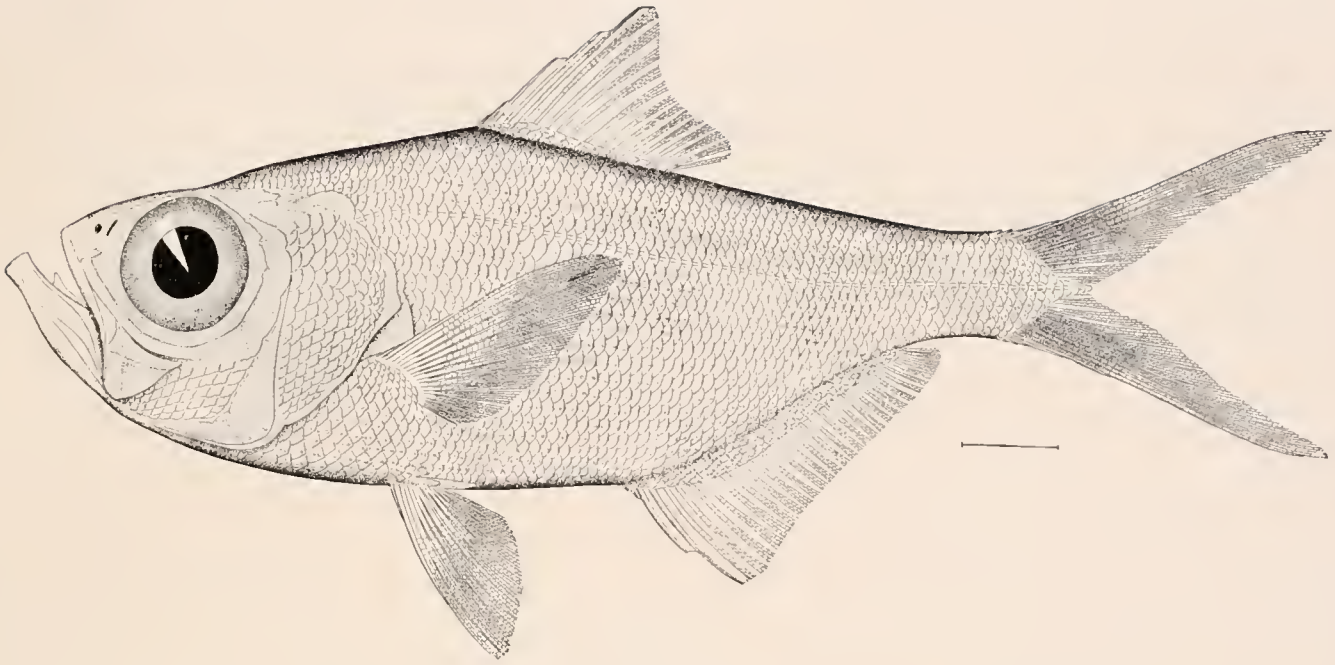
196*a*.



196*b*.

191*a*, *b*. NOTACANTHUS ANALIS. (p. 165.)
193. GIGLIOLIA MOSELEYI. (p. 169.)
195*a*, *b*. MACDONALDIA ROSTRATA. (p. 171

192*a*, *b*. NOTACANTHUS SEXSPINIS. (p. 163.)
194*a*, *b*. POLYACANTHONOTUS RISSOANUS. (p. 170.)
196*a*, *b*. LIPOGENYS GILLII. (p. 173.)



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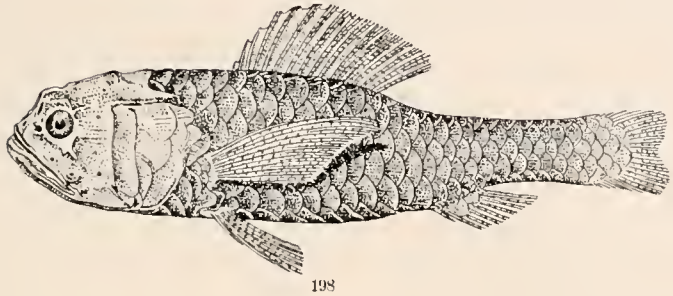
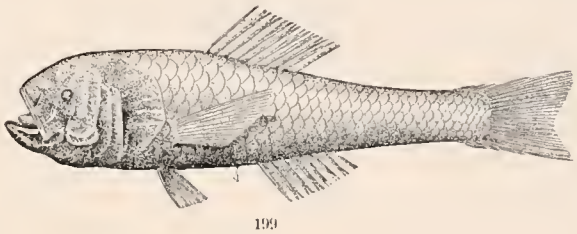
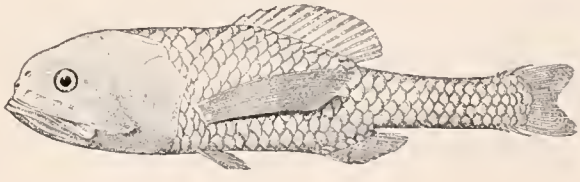


198



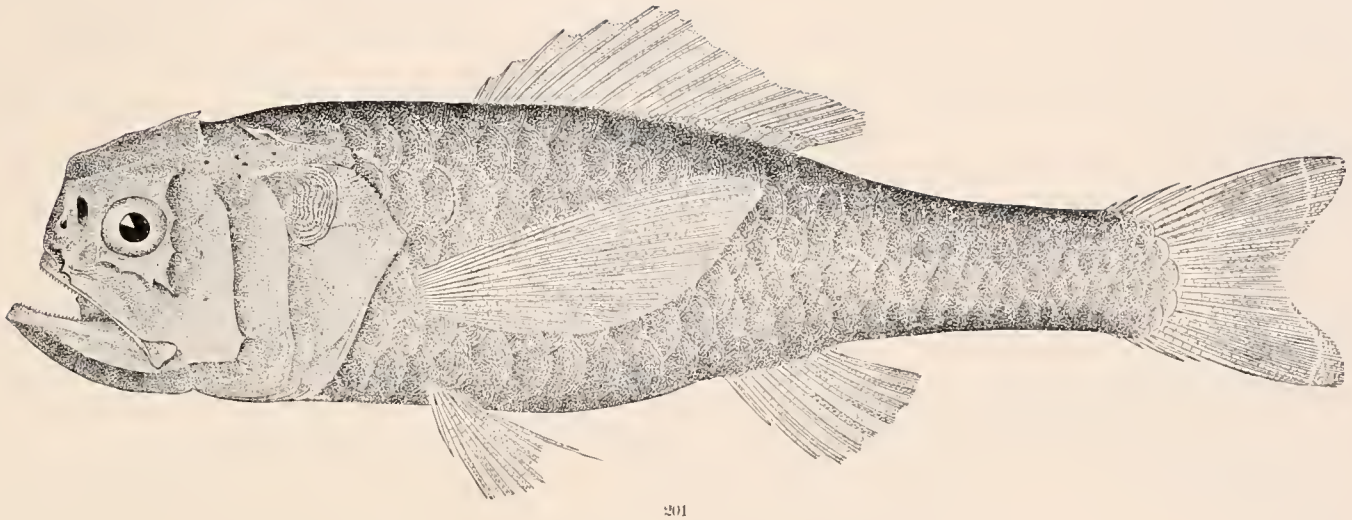
199

200



200*a*

197. Beryx splendens. (p. 176.)
198. Melamphæs typhlops. (p. 177.)
199. Scopelogadus cocles. (p. 182.)
200. Poromitra capito. (p. 183.)
200*a*. Plectromus crassiceps. (p. 180.)



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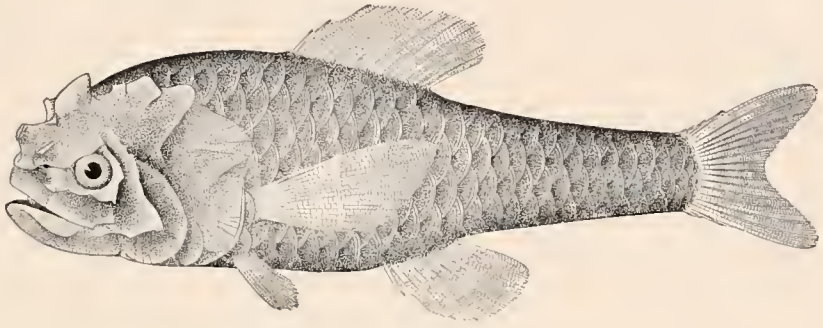
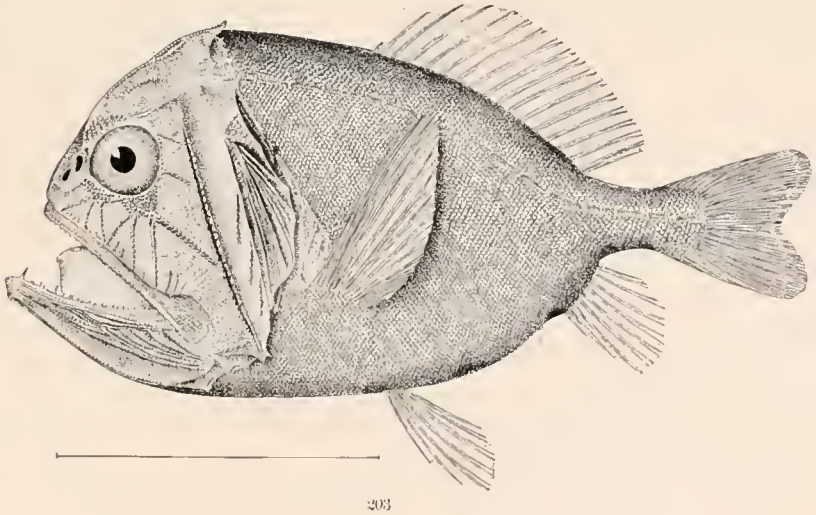
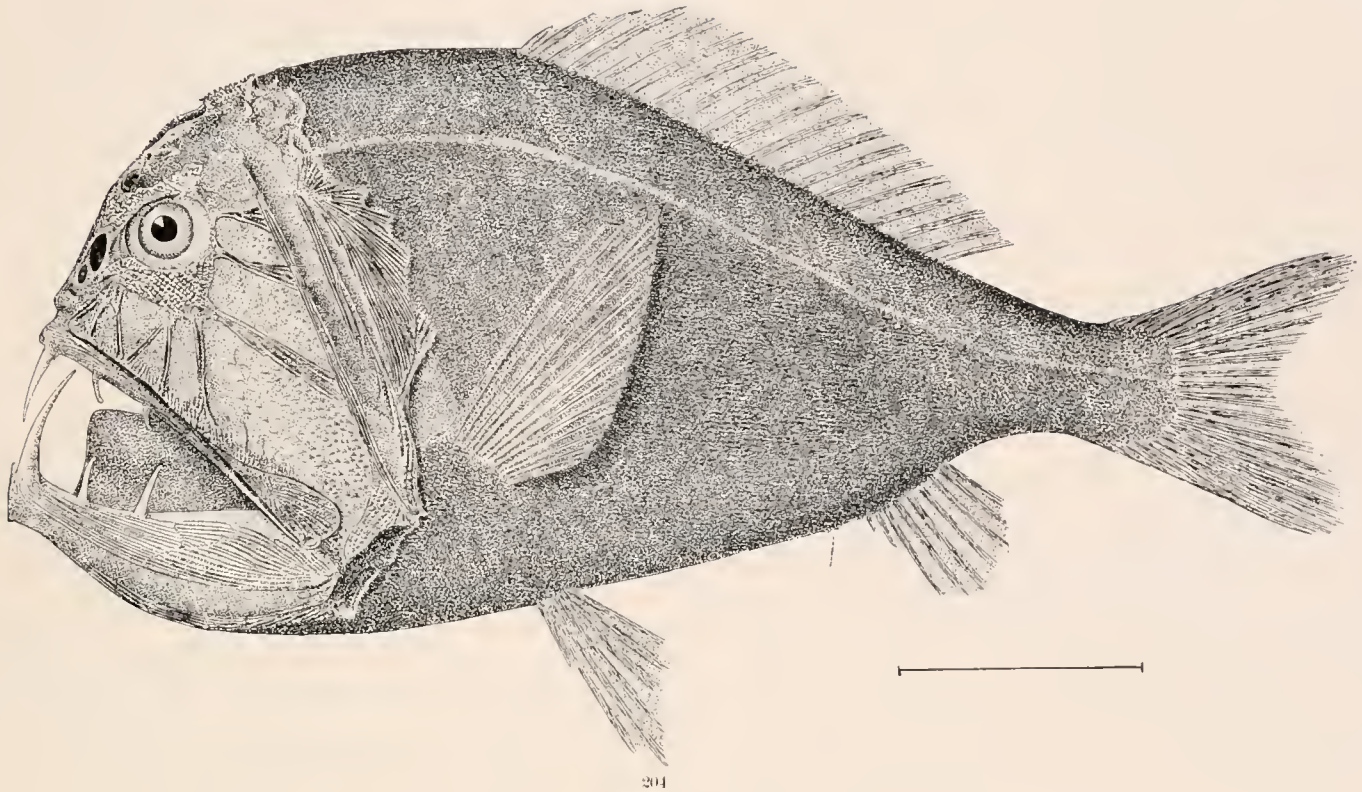


202



203

201. Plectromus suborbitalis. (p. 179.) 202. Plectromus Beanii. (p. 179.)
203. Anoplogaster cornutus. (p. 184.)



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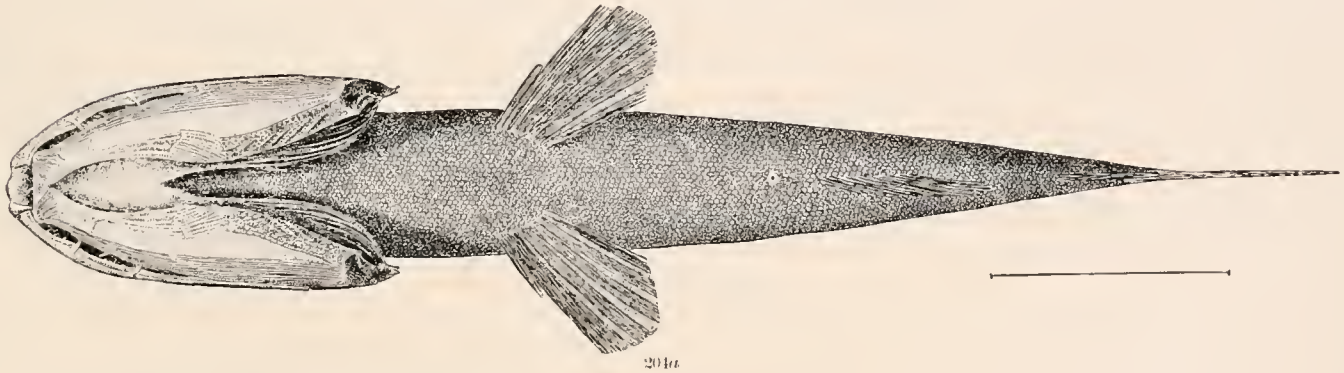
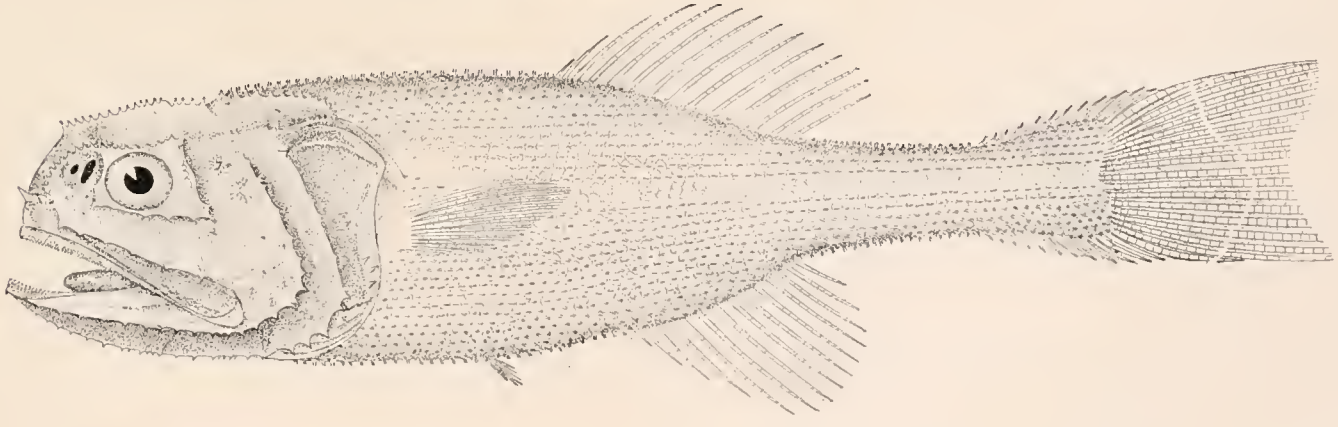


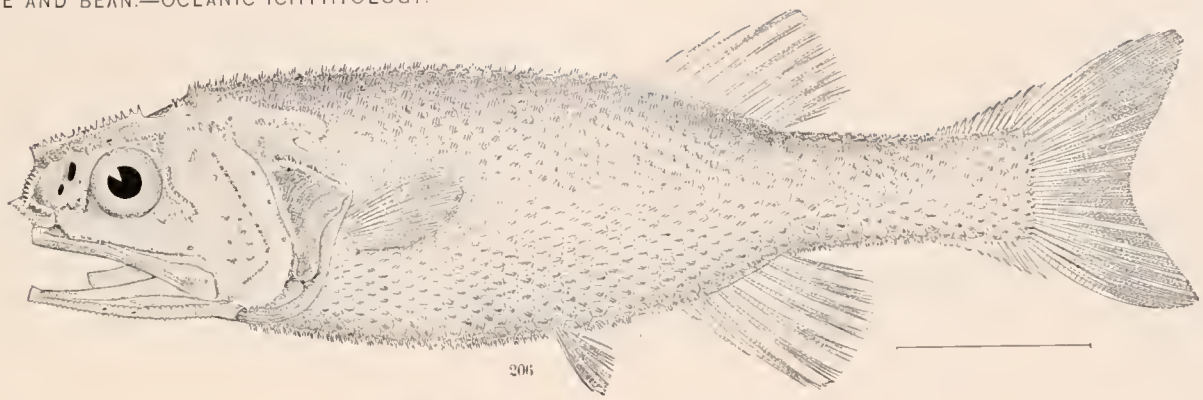
204*a*



205

204, 204*a*. CAULOLEPIS LONGIDENS. (p. 185.)

205. STEPHANOBERYX MONÆ. (p. 186.)



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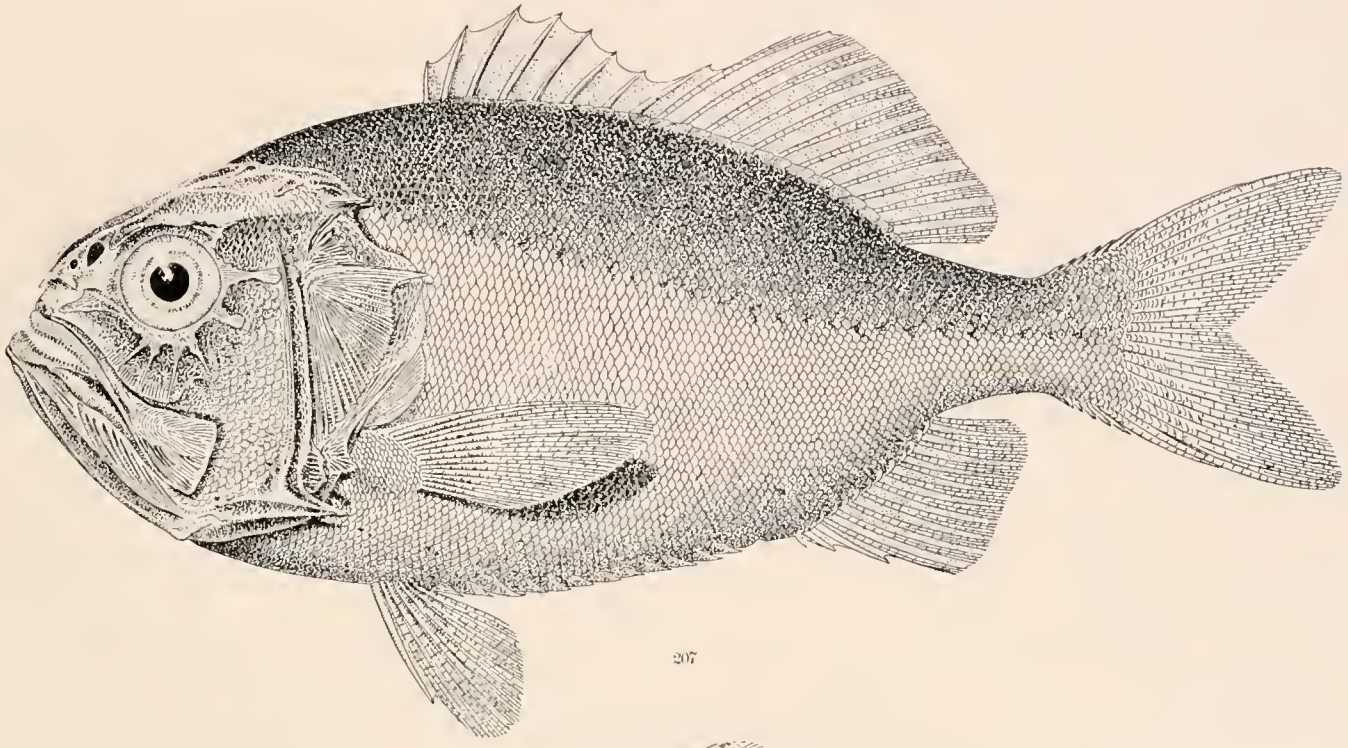

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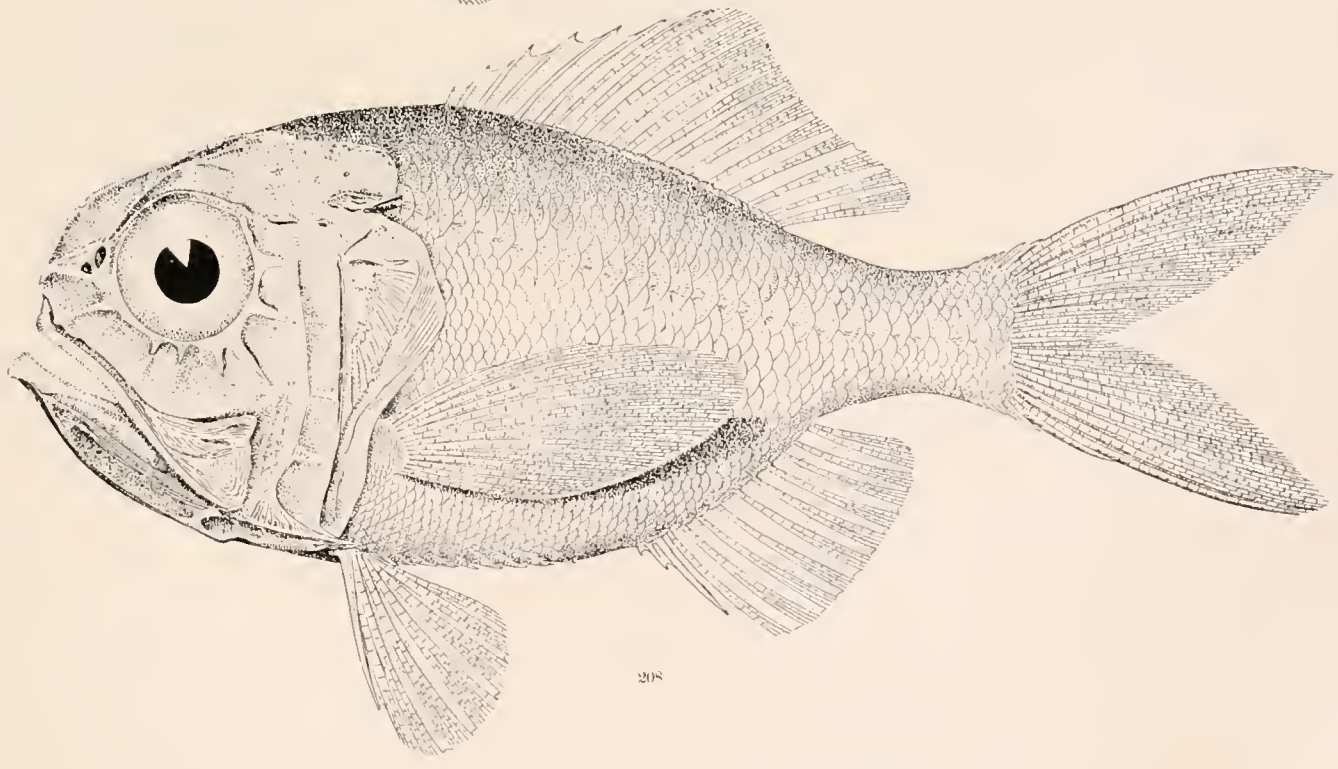
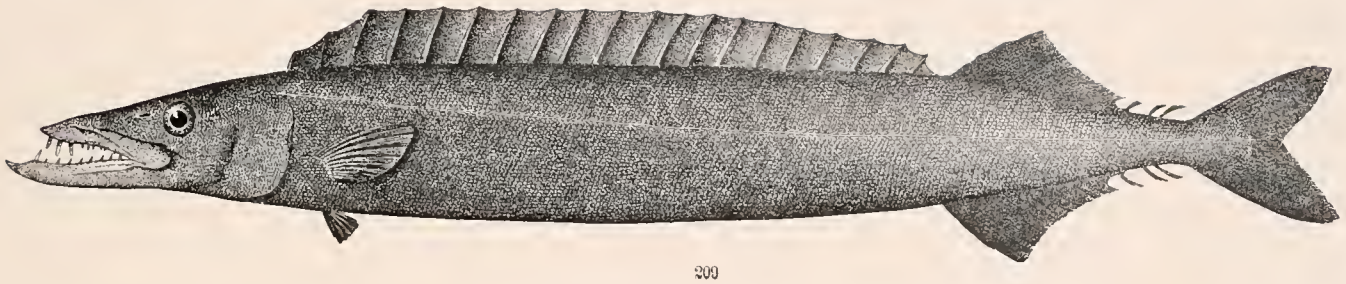


208

206. Stephanoberyx Gillii. (p. 187.) 207. Trachichthys Darwinii. (p. 188.)
208. Hoplostethus mediterraneus. (p. 189.)



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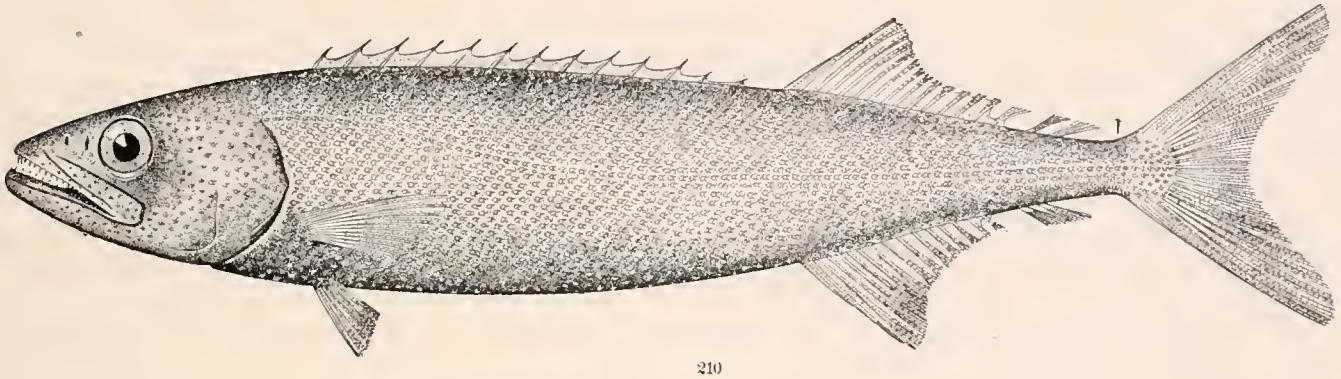

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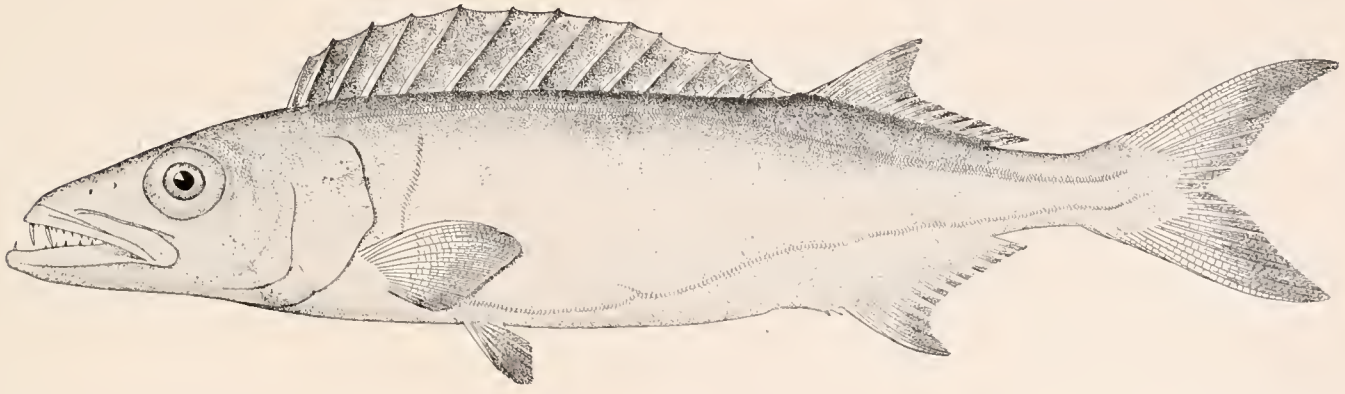
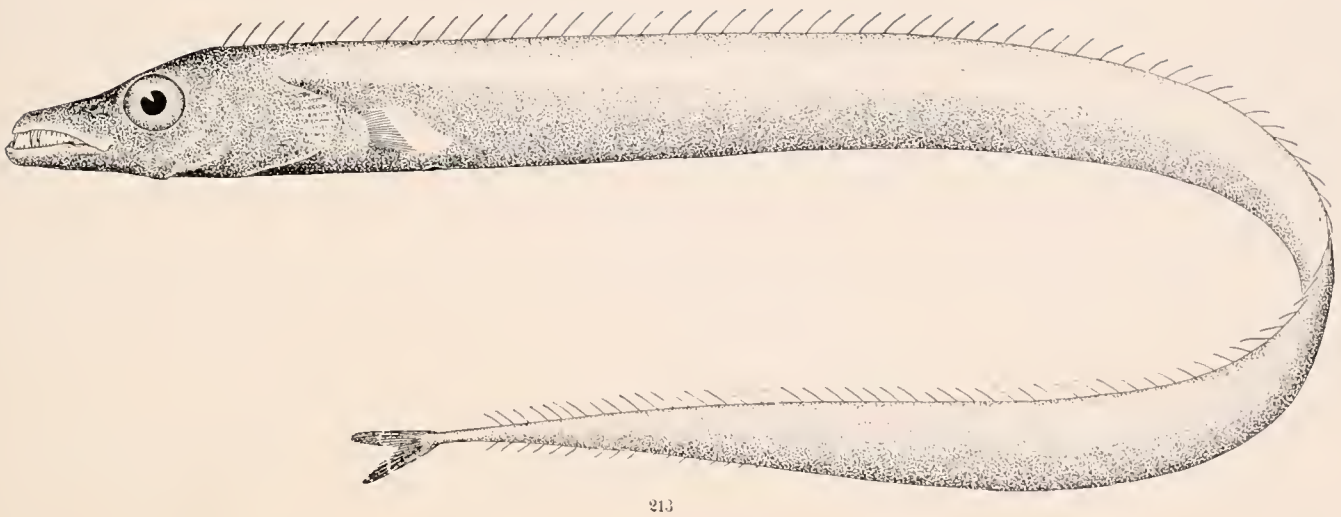


211

212

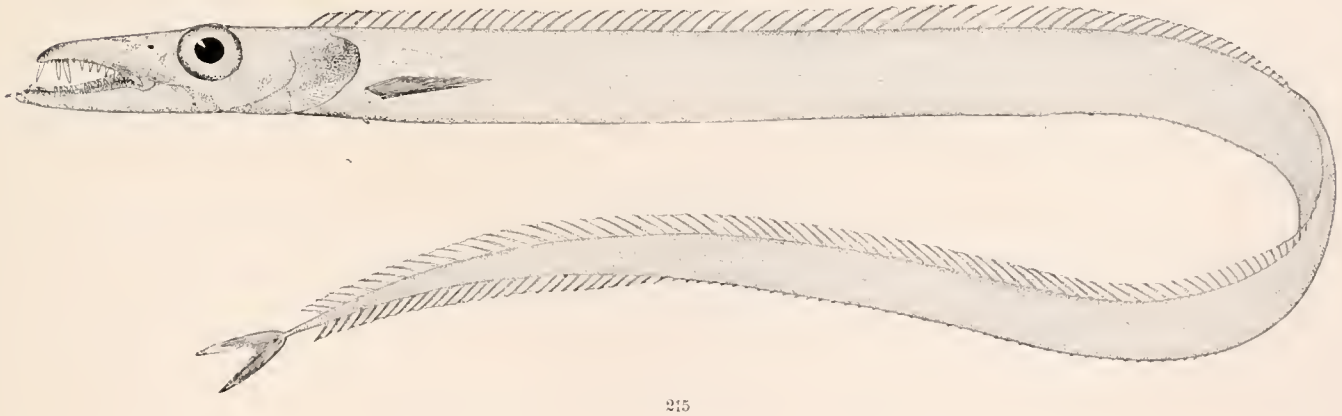
209. Thyrsitops violaceus. (p. 195.)
211. Epinnula magistralis. (p. 198.)

210. Ruvettus pretiosus. (p. 196.)
212. Dicrotus parvipinnis. (p. 201.)



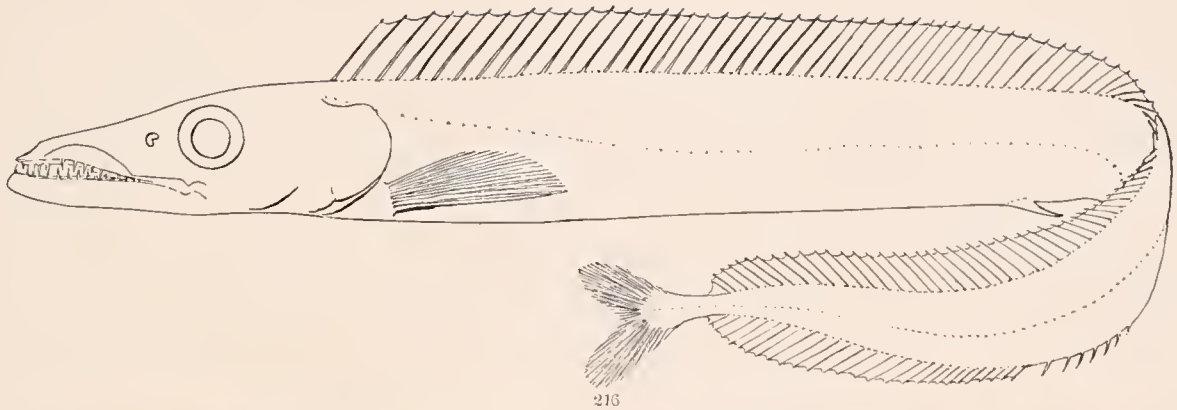
213

214



215

213. Lepidopus caudatus. (p. 203.) 214. Evoxymetopon taeniatus. (p. 204.)
215. Benthodesmus atlanticus. (p. 205.)



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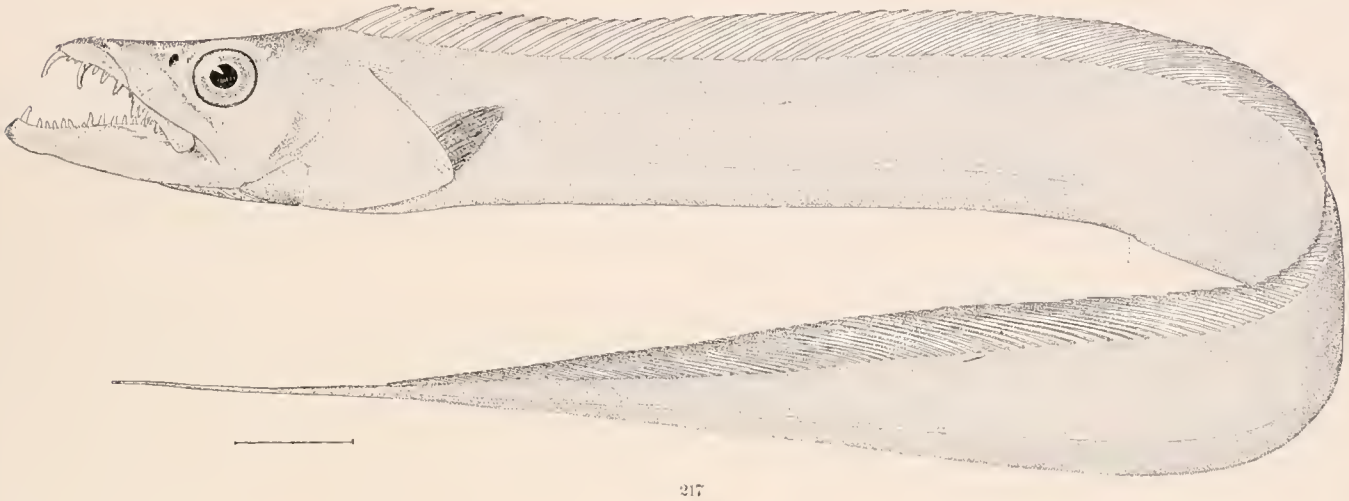

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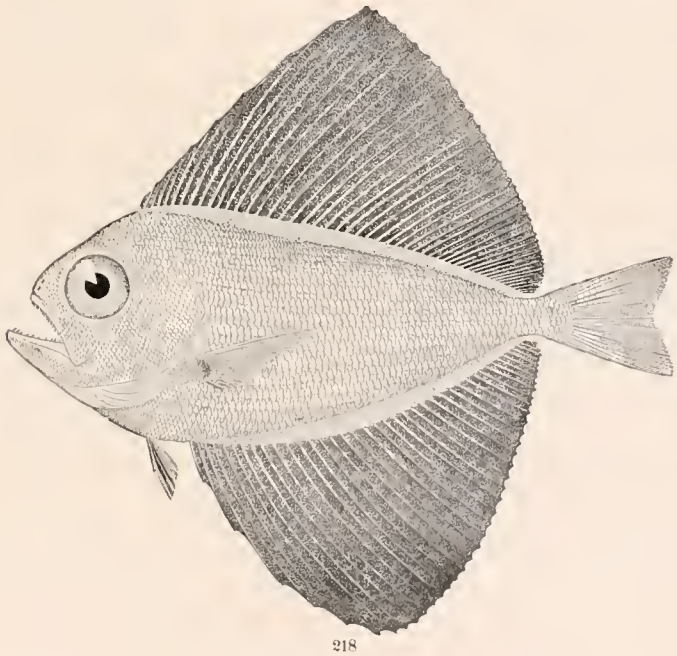
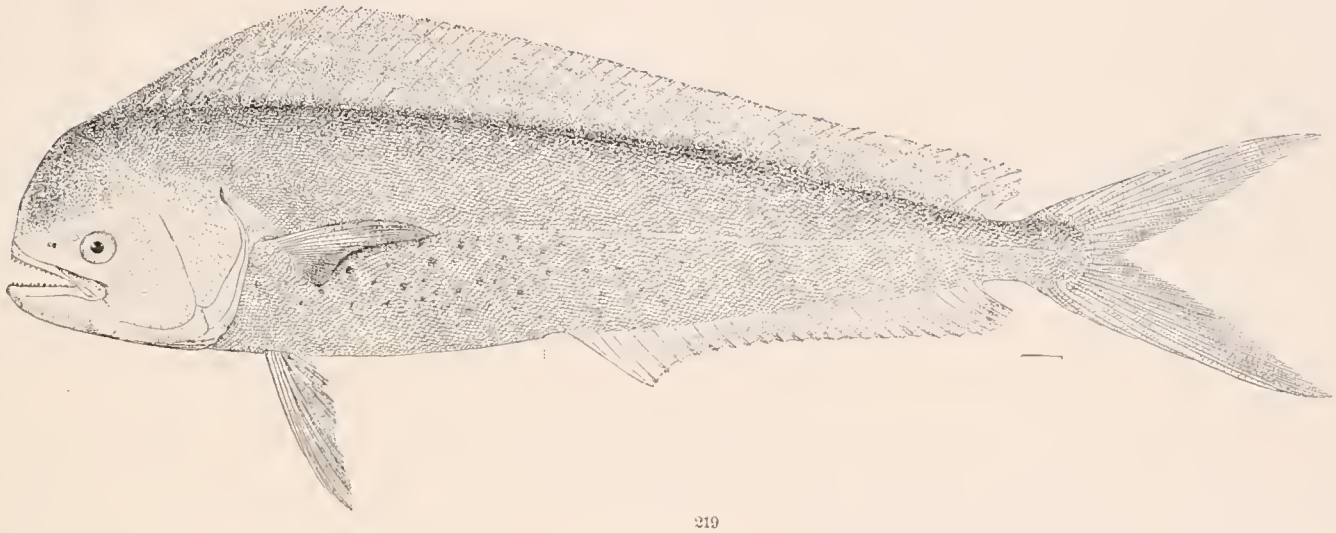


218

216. Aphanopus carbo. (p. 207.) 217. Trichiurus lepturus. (p. 208.)
218. Pteraclis carolinus. (p. 212.)



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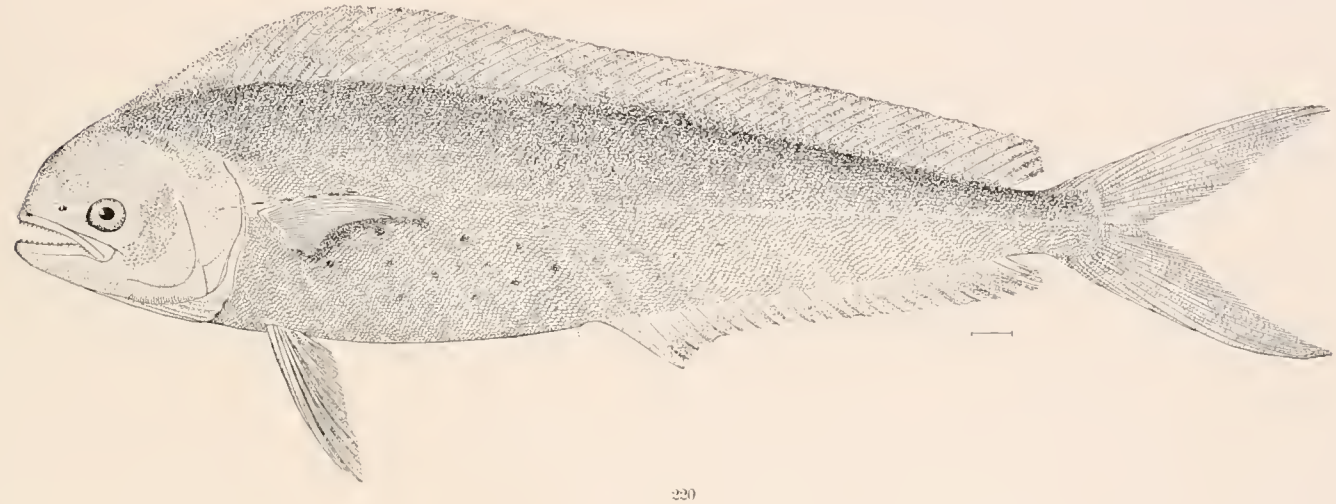

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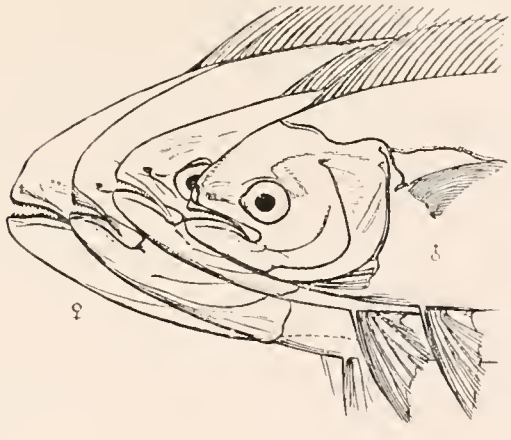
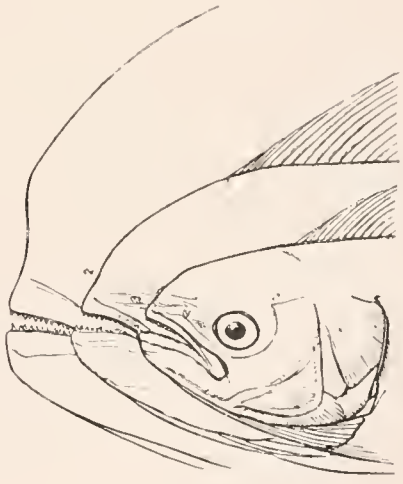
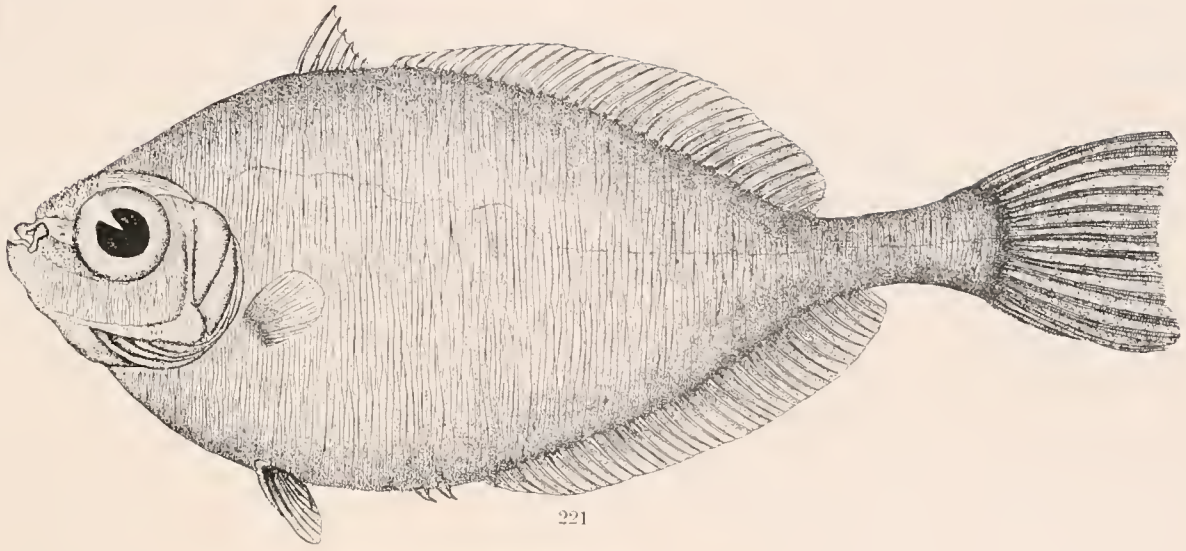


220*a*



220*b*

219. CORYPHÆNA HIPPURUS (old male). (p. 209.) 220. CORYPHÆNA HIPPURUS (young). (p. 209.)
220*a*, *b*. CORYPHÆNA HIPPURUS. (p. 209.)



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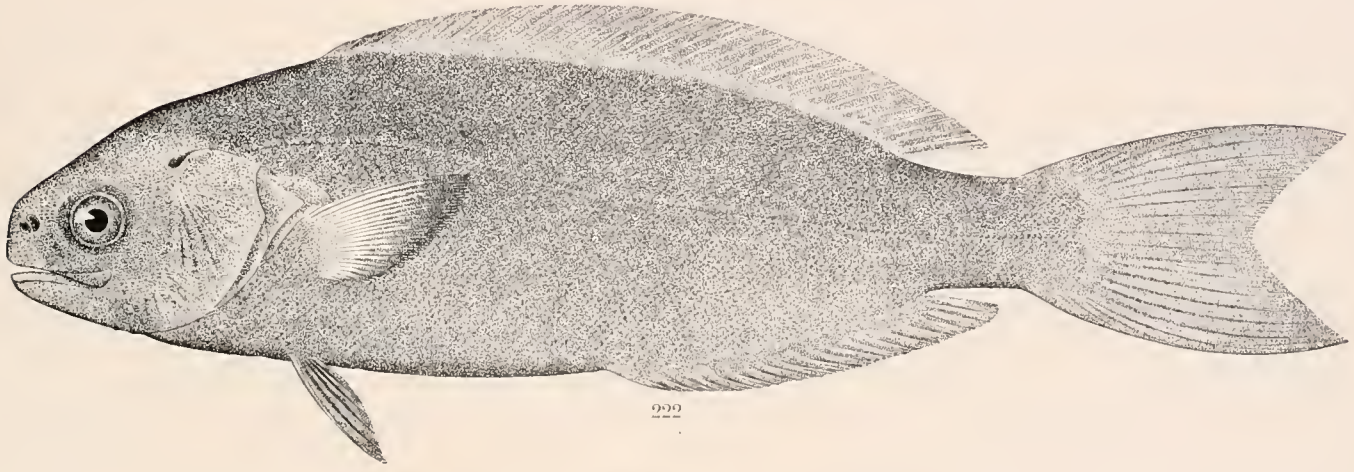


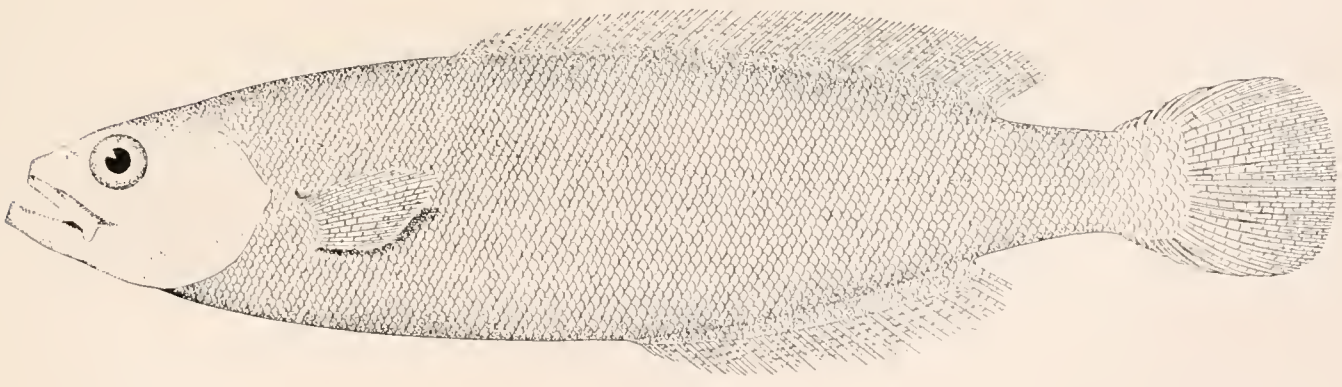
222

223

221. GRAMMICOLEPIS BRACHIUSCULUS. (p. 218.) 222. CENTROLOPHUS POMPILUS. (p. 214.)
223. SCHEDOPHILUS MEDUSOPHAGUS. (p. 214.)

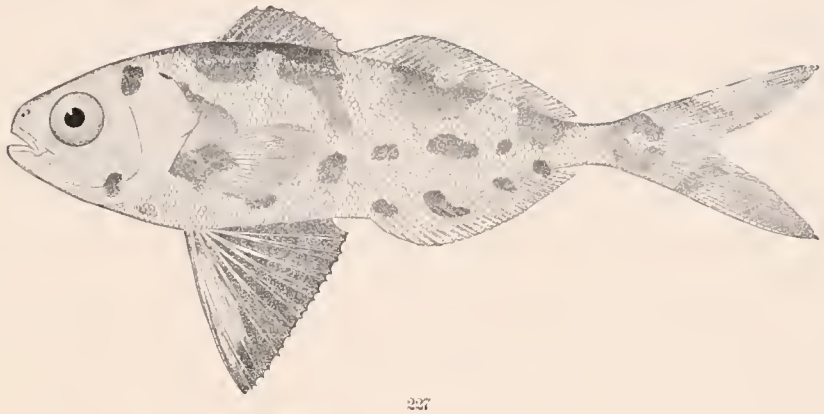
224

225



226

224. Icosteus enigmaticus. (p. 215.)
225. Acrotus Willoughbyi. (p. 217.)
226. Ichthys Lockingtonii. (p. 216.)



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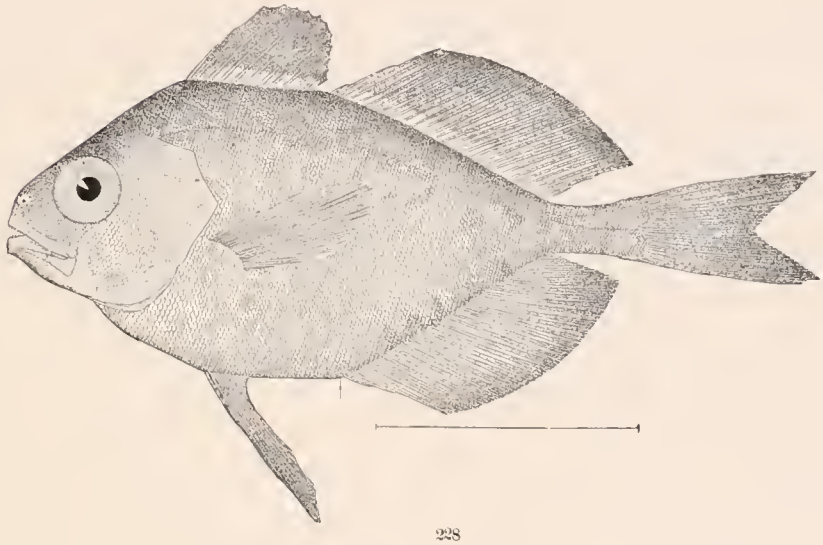

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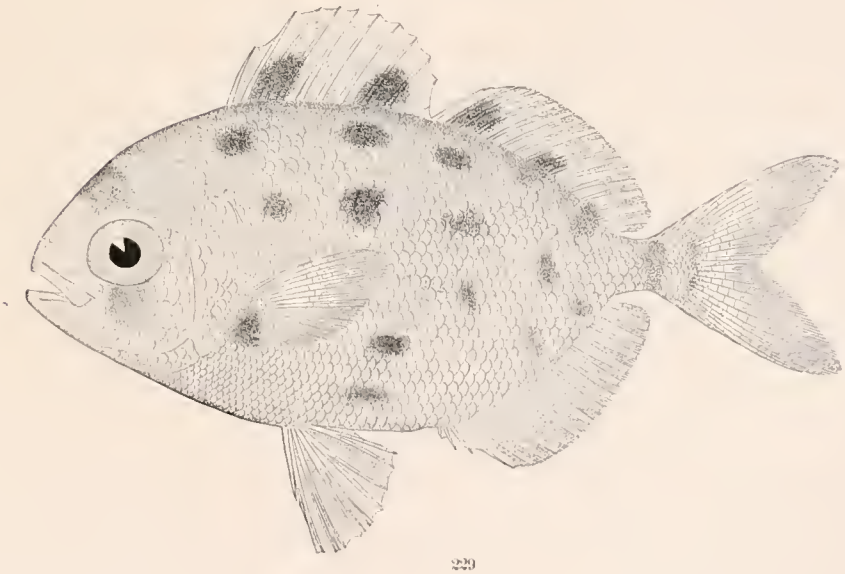
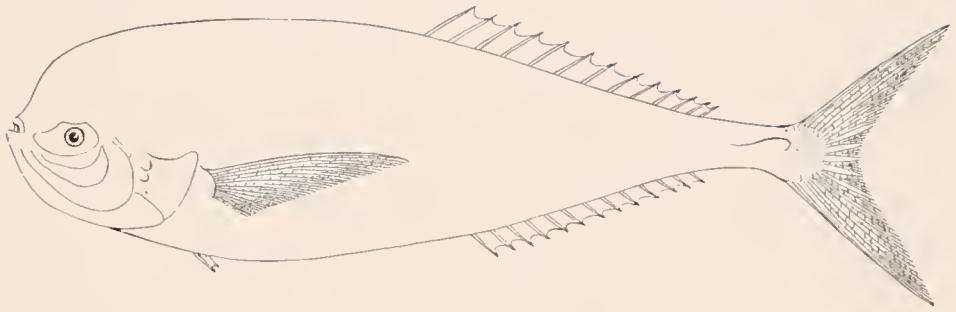


229

227. Nomeus Gronovii. (p. 220.)
228. Psenes pellucidus. (p. 221.)
229. Psenes maculatus. (p. 221.)



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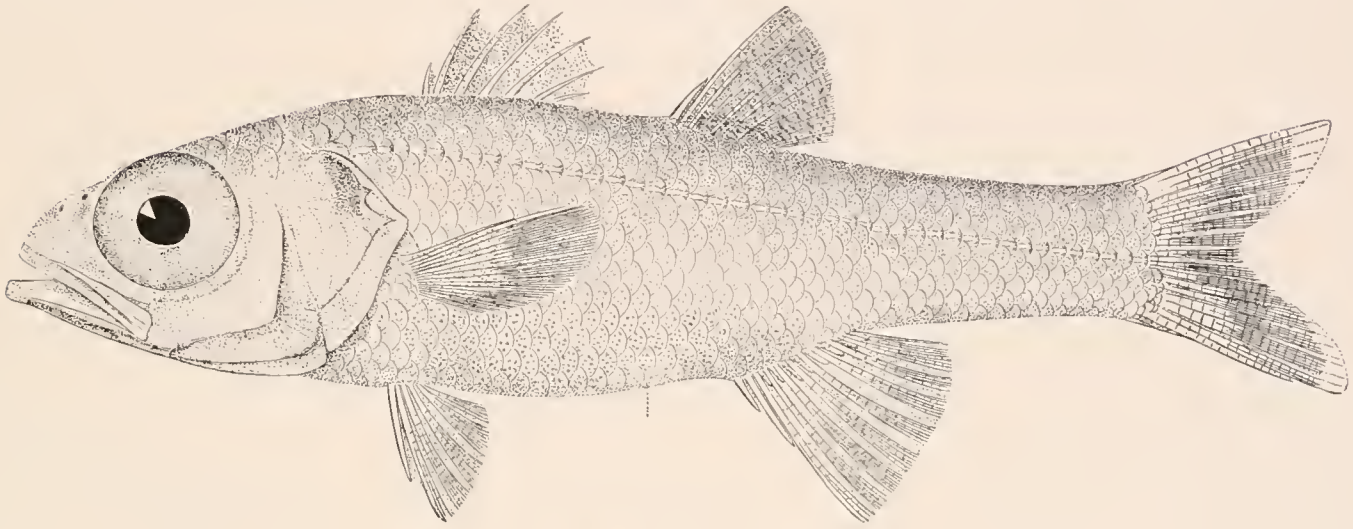

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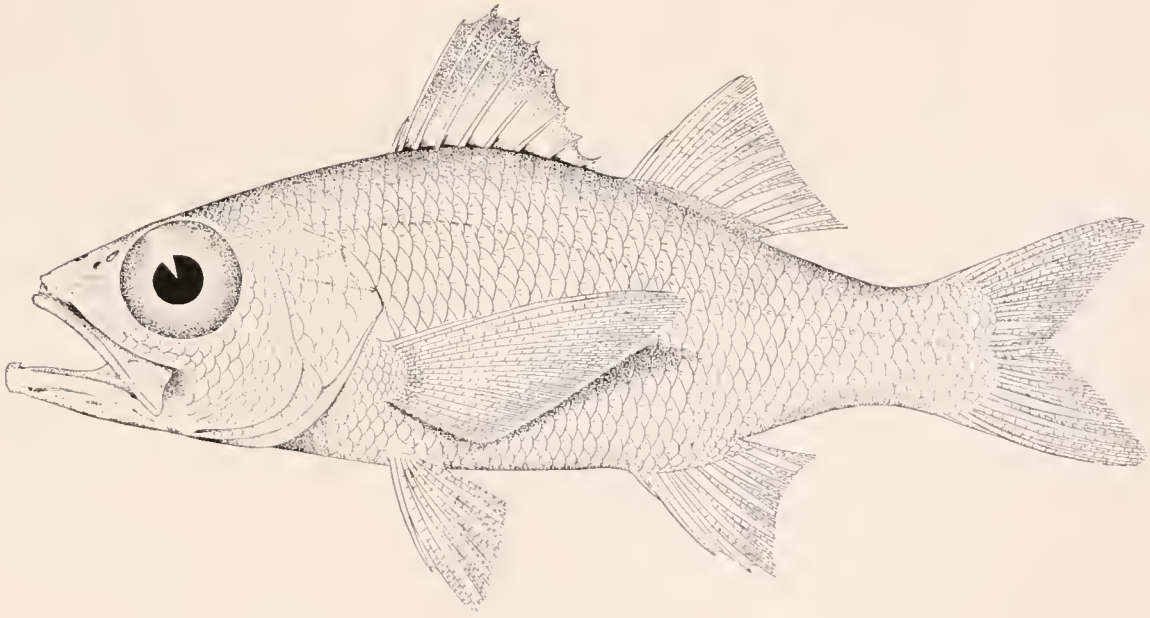
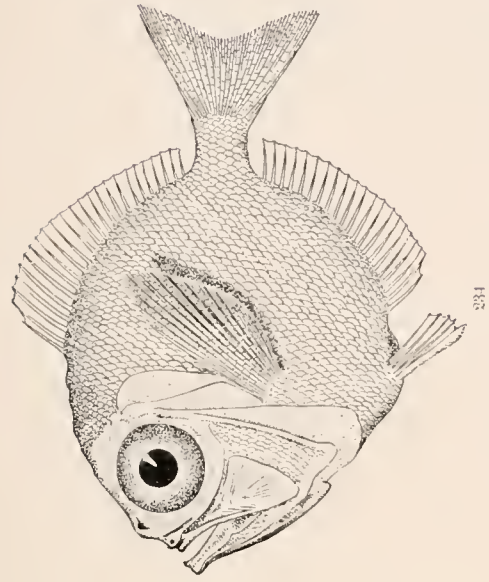


232

230. Luvarus imperialis. (p. 222.)
231. Glossamia pandionis. (p. 231.)
232. Verilus sordidus. (p. 240.)



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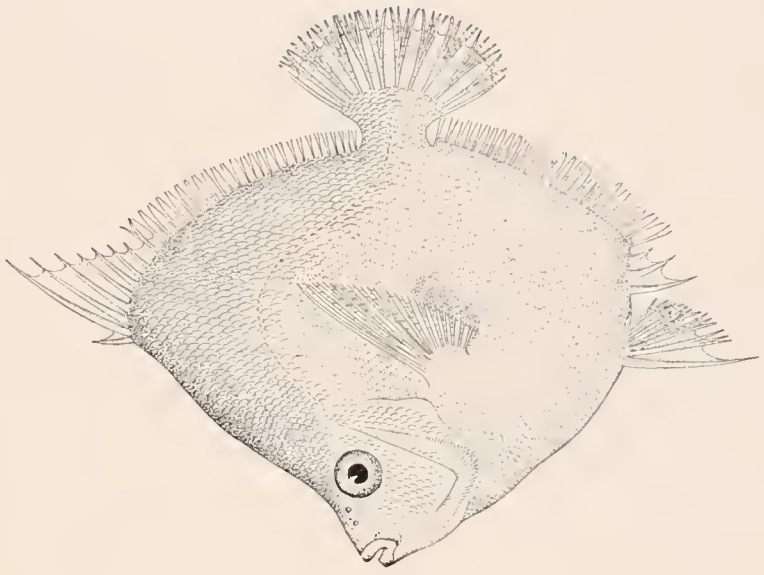

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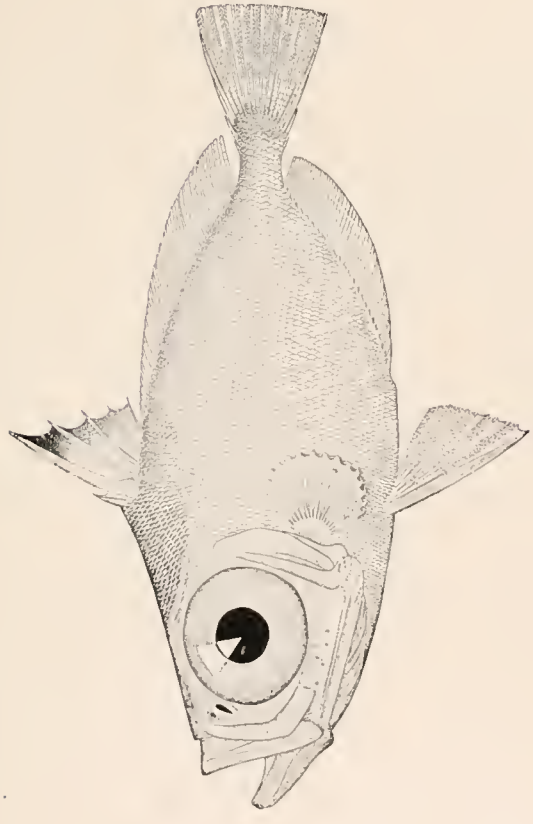

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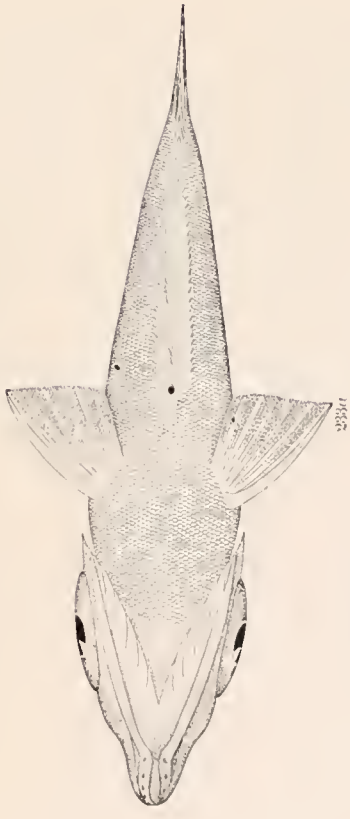
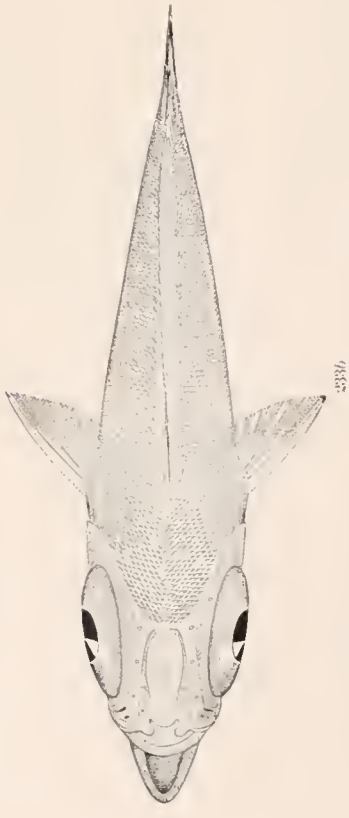
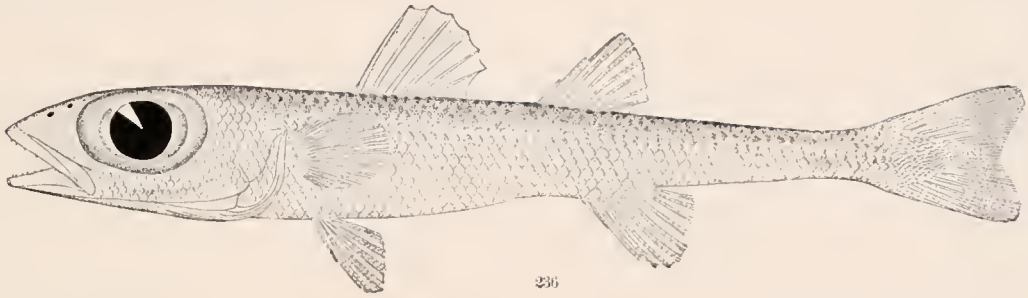


233*a*



233*b*

233, 233*a*, *b*. CYTTUS HOLOLEPIS. (p. 225.) 234. DIRETMUS ARGENTEUS. (p. 211.) 235. ANTIGONIA CAPROS. (p. 229.)



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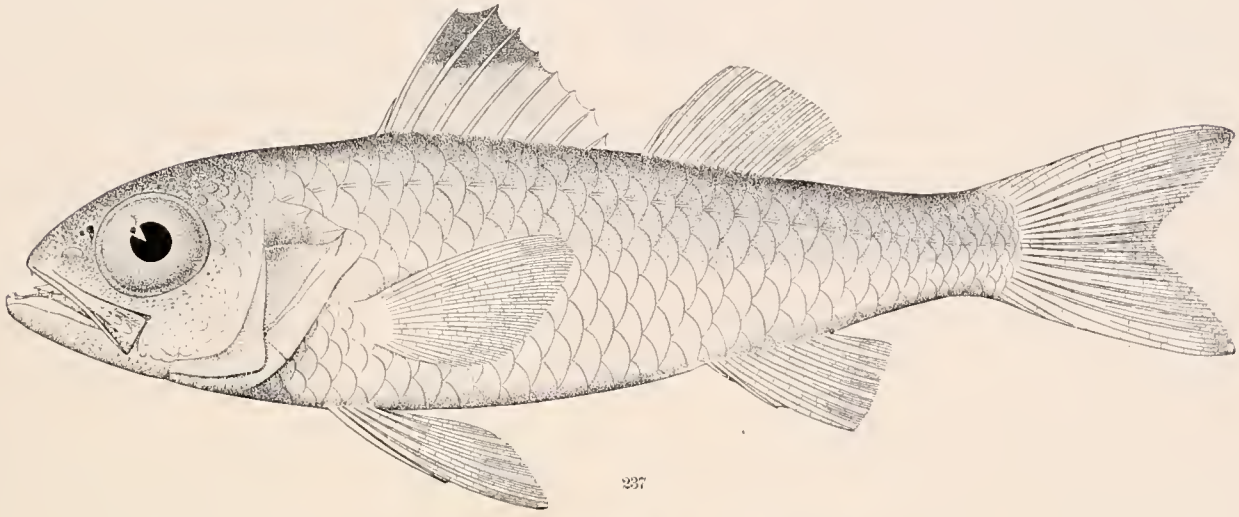

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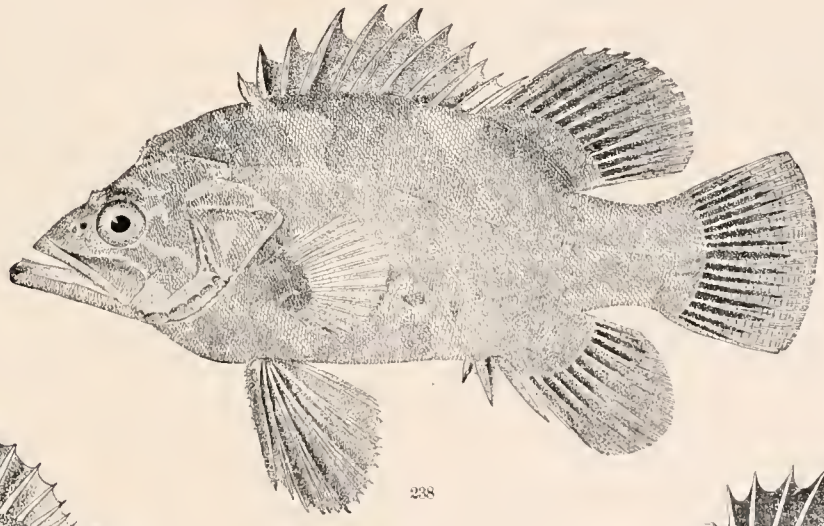

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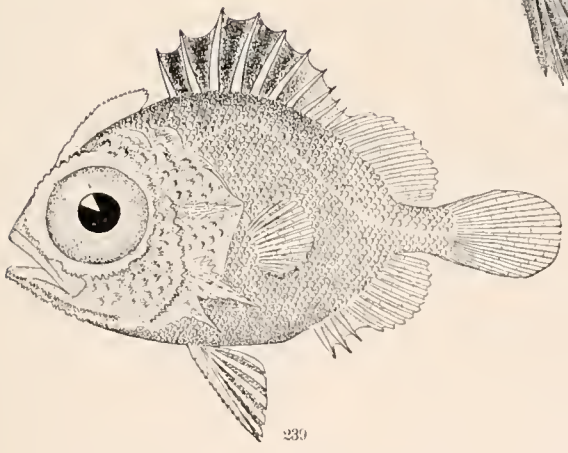

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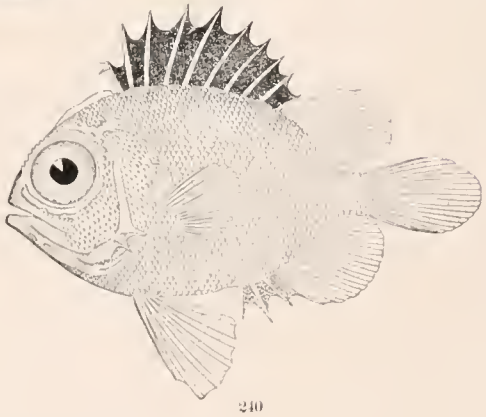
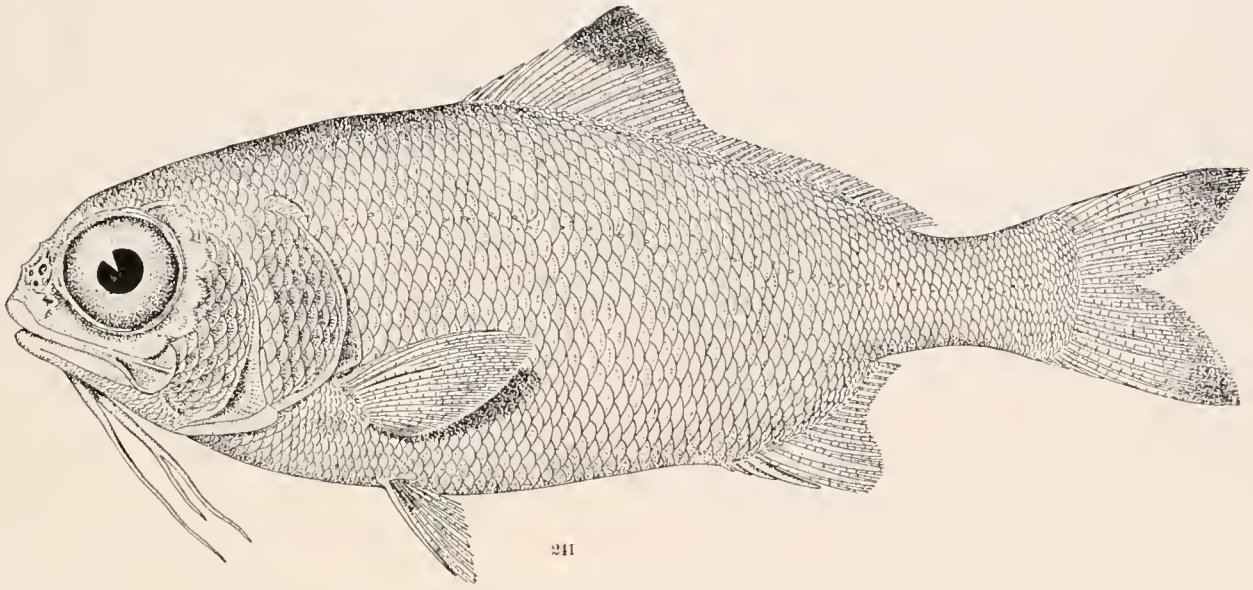


240

236. Epigonus occidentalis. (p. 233.)
238. Polyprion americanum. (p. 238.)

237. Hypoclydonia bella. (p. 236.)
239, 240. Pseudopriacanthus altus. (p. 242.)



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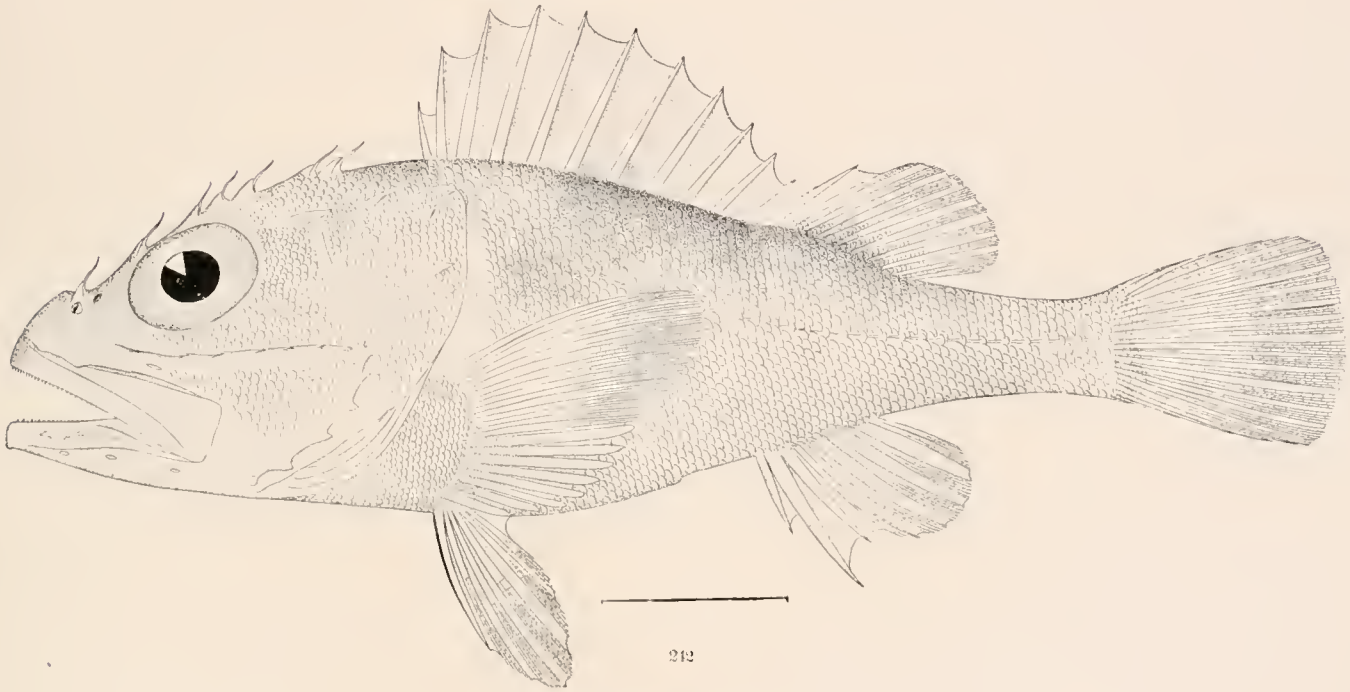

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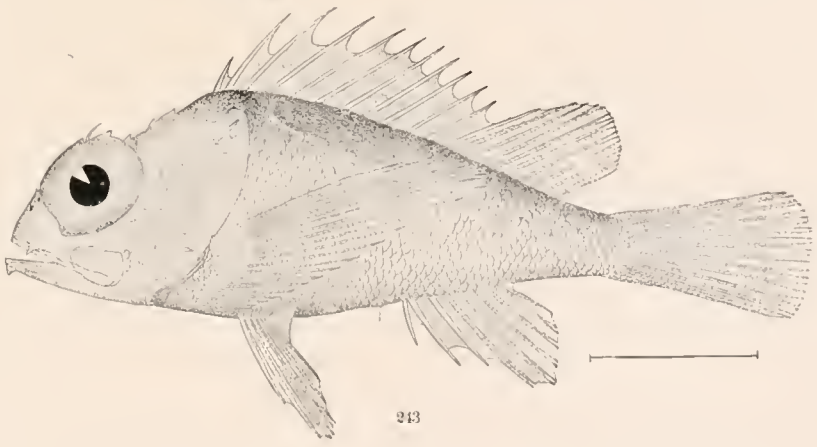
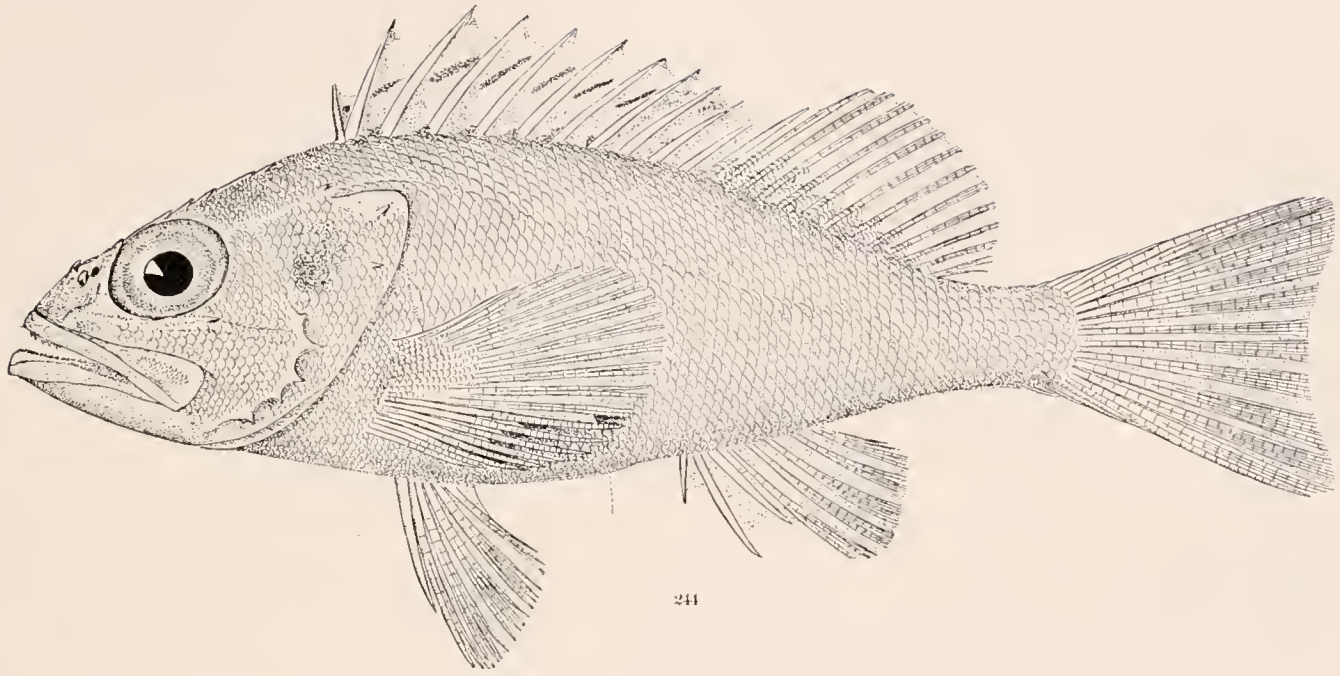


243

241. Polymixia nobilis. (p. 213.) 242. Scorpæna cristulata. (p. 216.)
243. Scorpæna Agassizii. (p. 217.)



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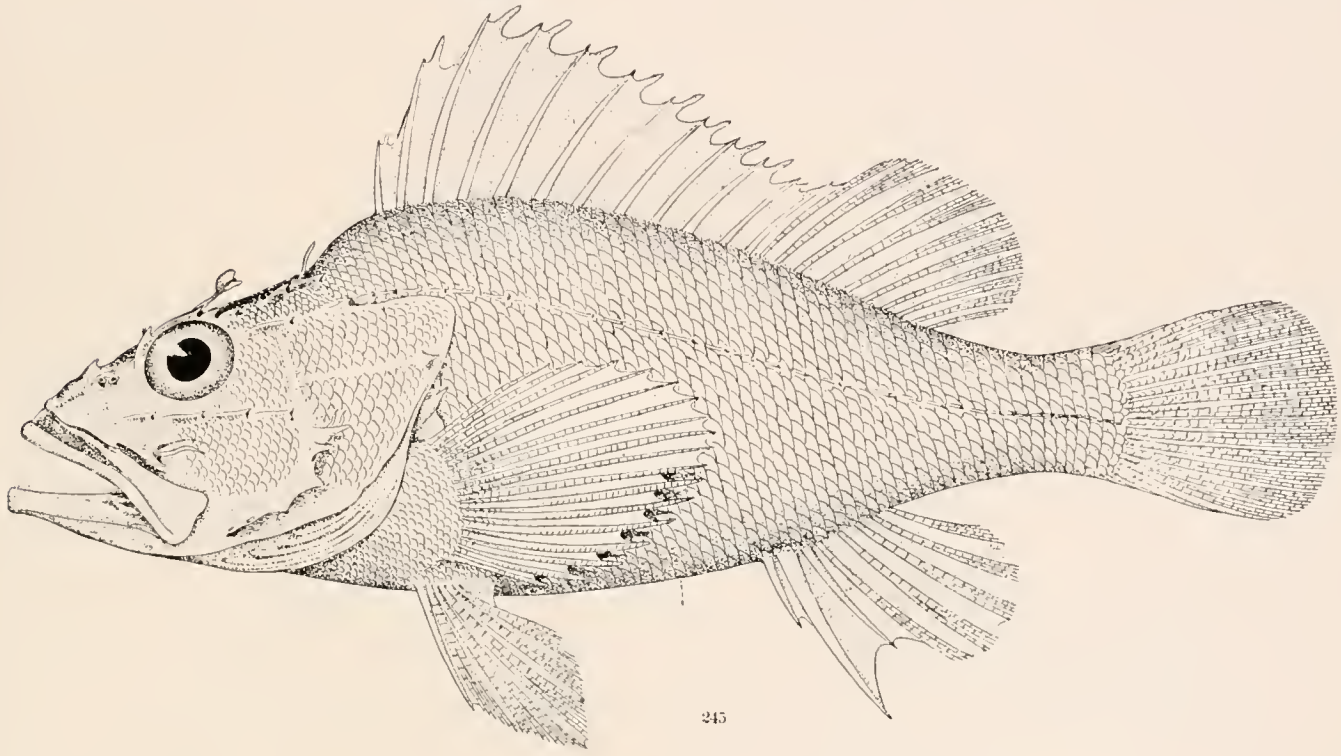

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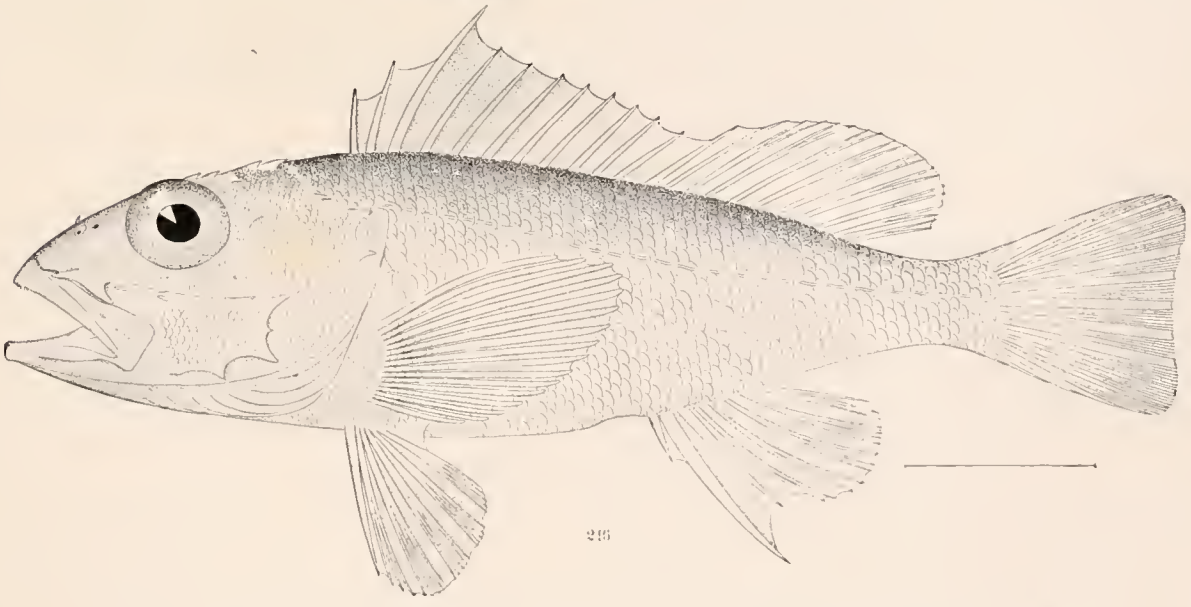
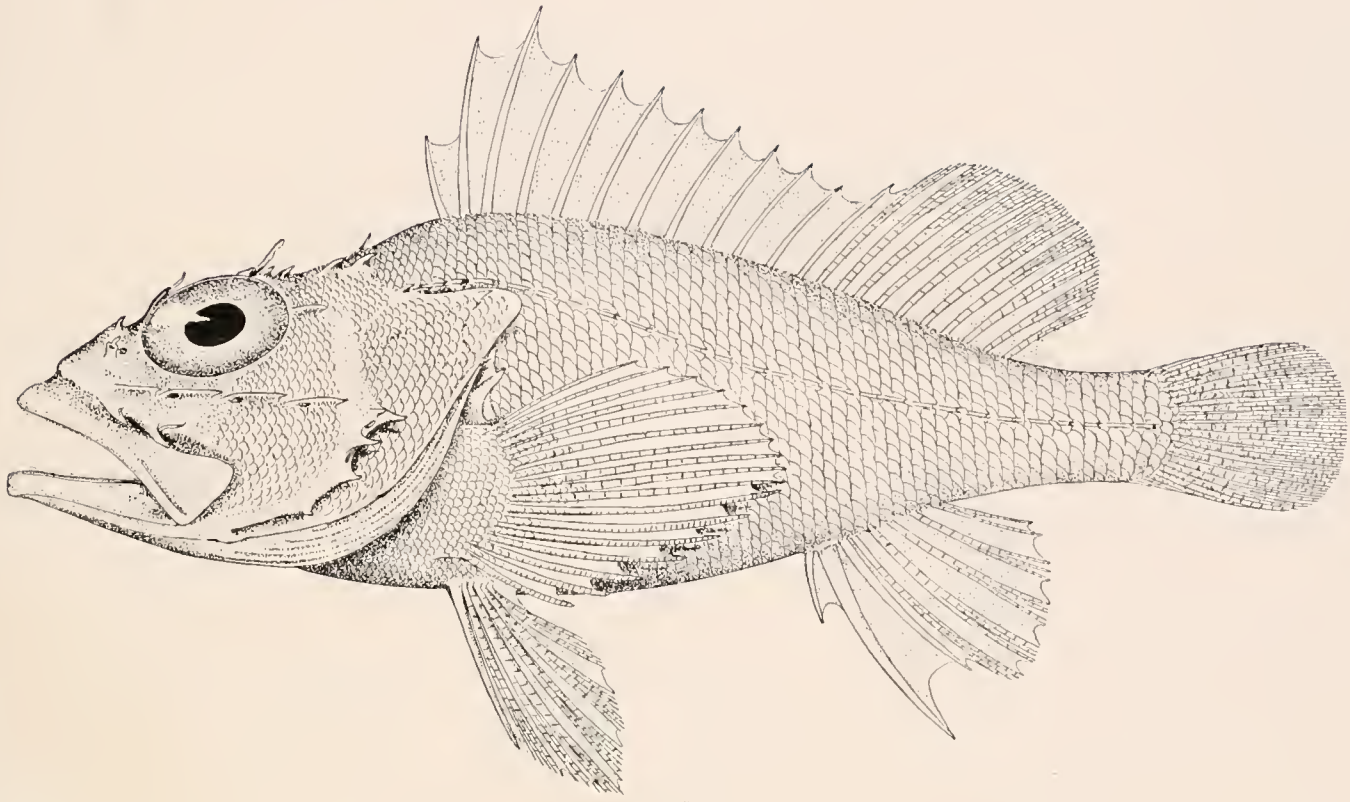


246

244. Helicolenus dactylopterus. (p. 250.)
245. Pontinus Rathbuni. (p. 255.)
246. Pontinus longispinis. (p. 258.)



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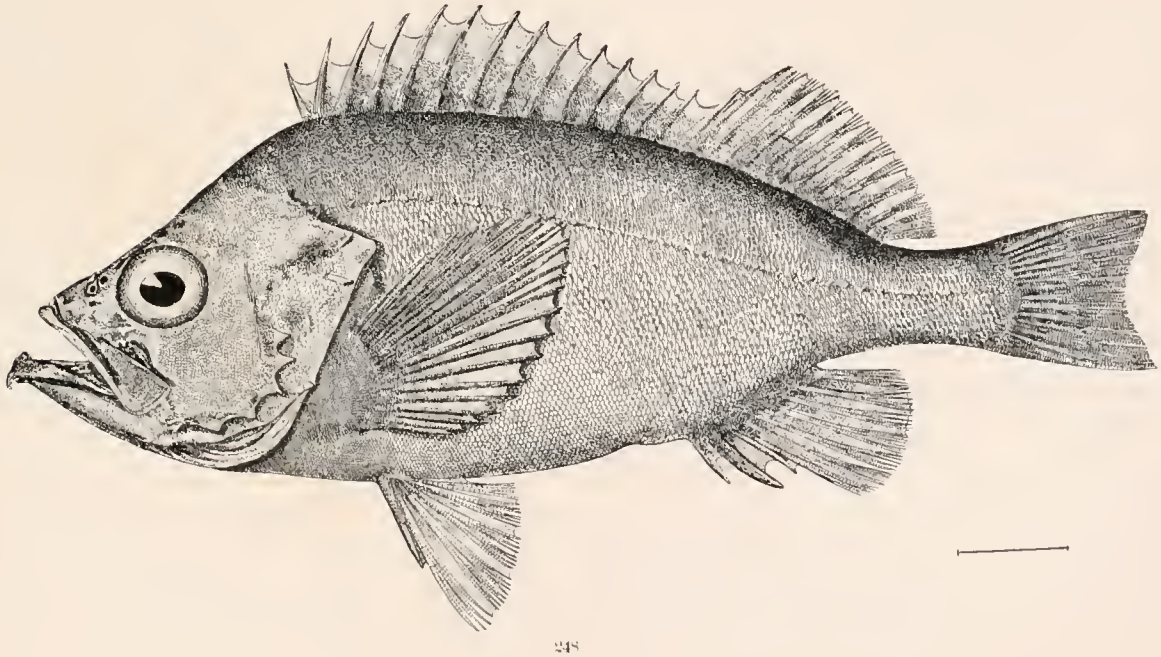
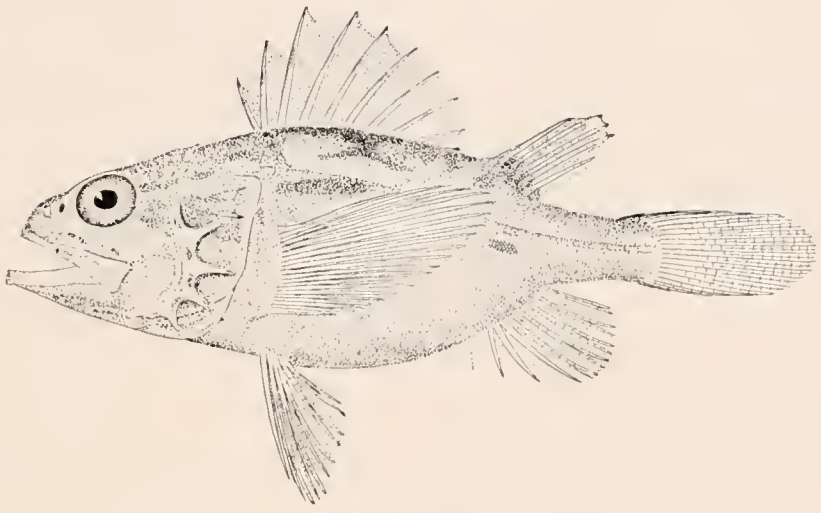


248

247. Pontinus macrolepis. (p. 257.)

248. Sebastes marinus. (p. 260.)



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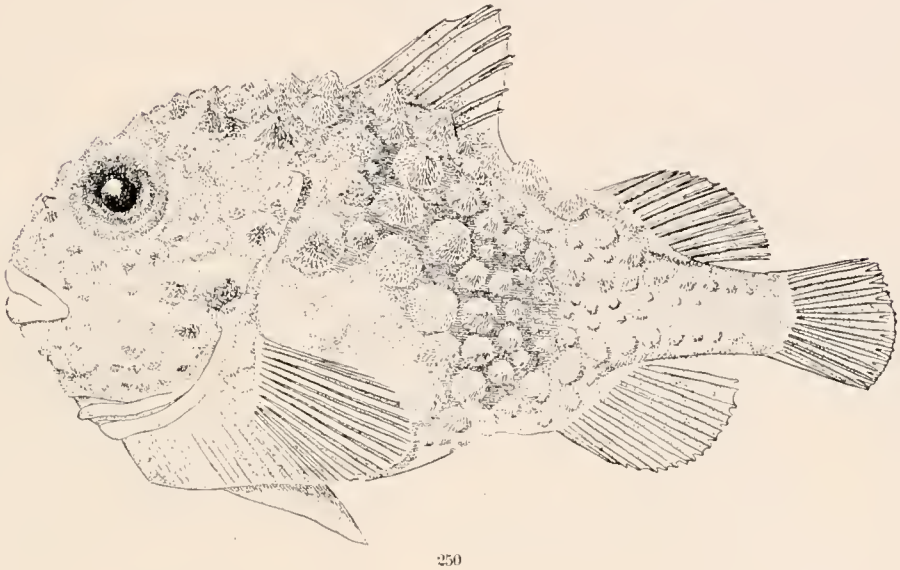


250

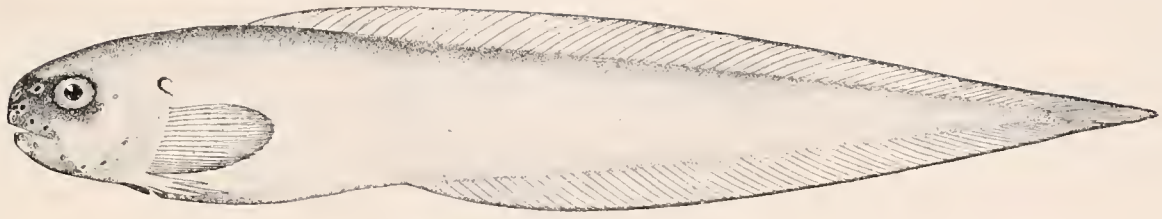
251*a*

251

251*b*

252

249. Setarches parmatus. (p. 264.)
251, 251*a*, *b*. Careproctus ranula. (p. 275.)
250. Eumicrotremus spinosus. (p. 272.)
252. Monomitra liparina. (p. 278.)



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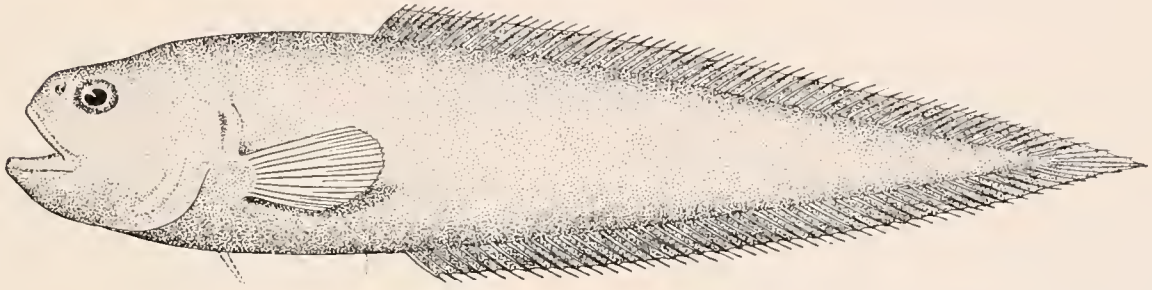

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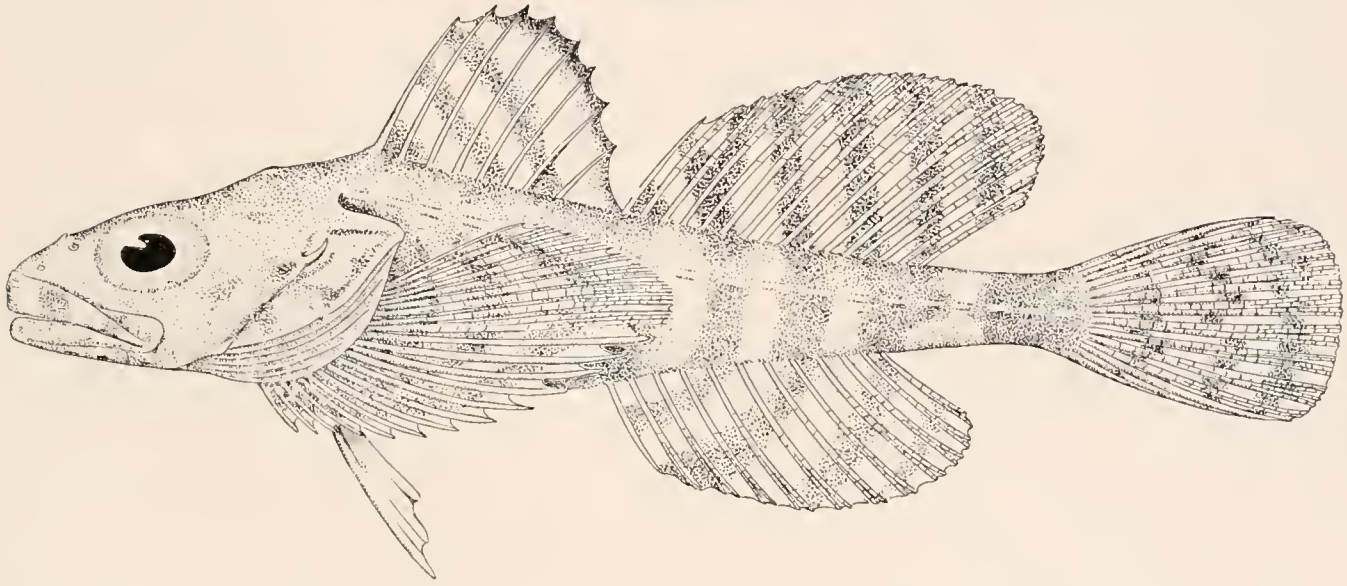

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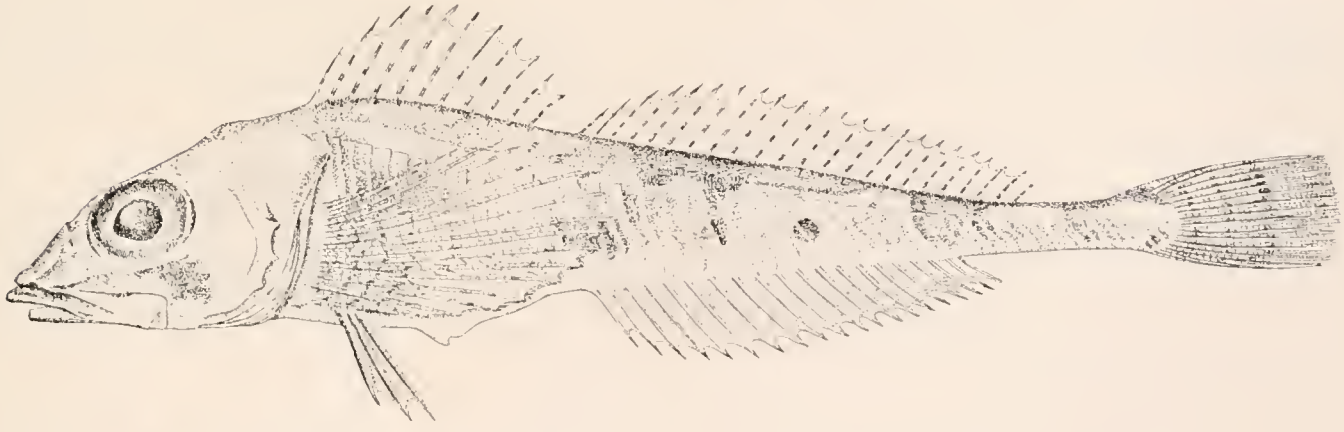
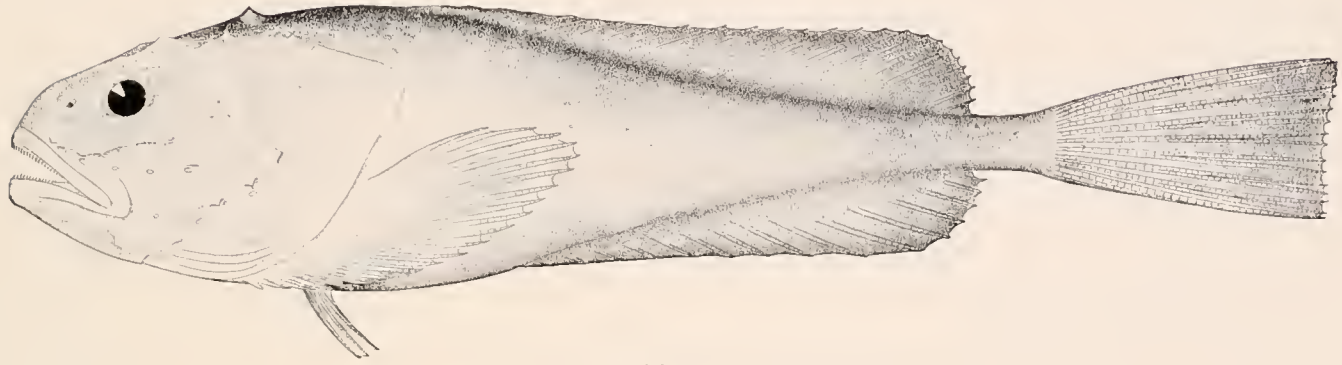


256

253. Paraliparis Copei. (p. 279.)
255. Artediellus uncinatus. (p. 267.)
254. Gymnolycodes Edwardsi. (p. 281.)
256. Triglops pingelii. (p. 269.)

257



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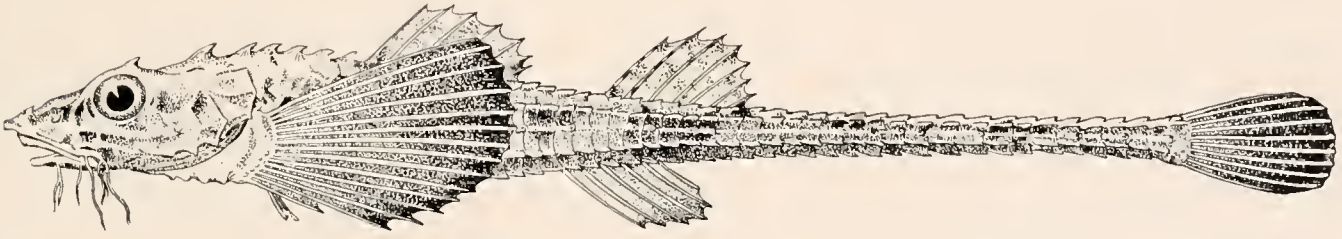

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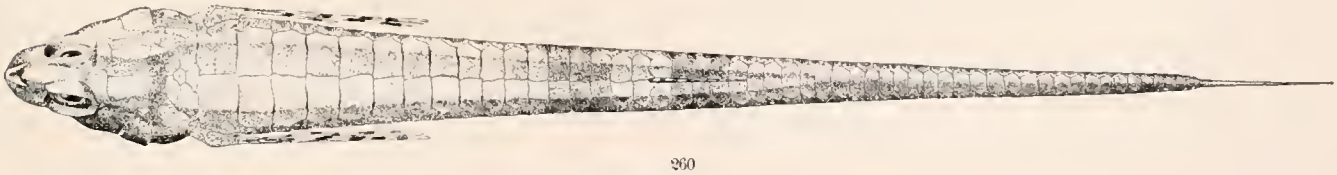
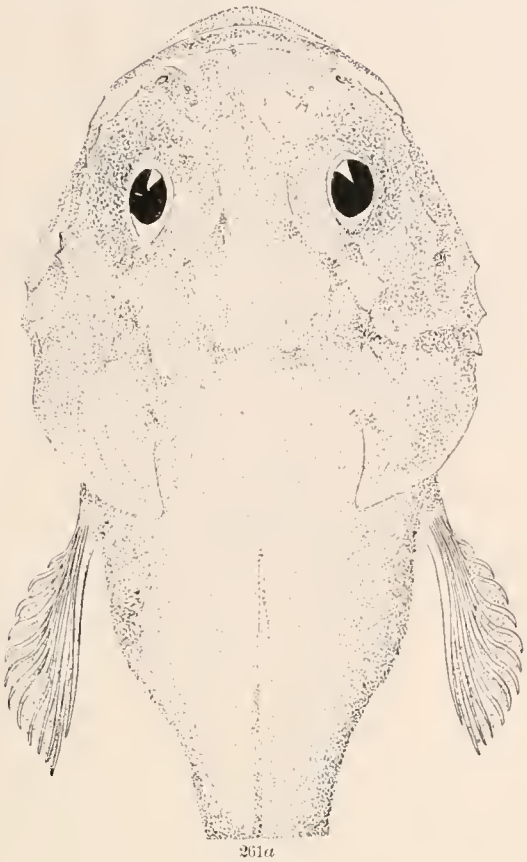


260

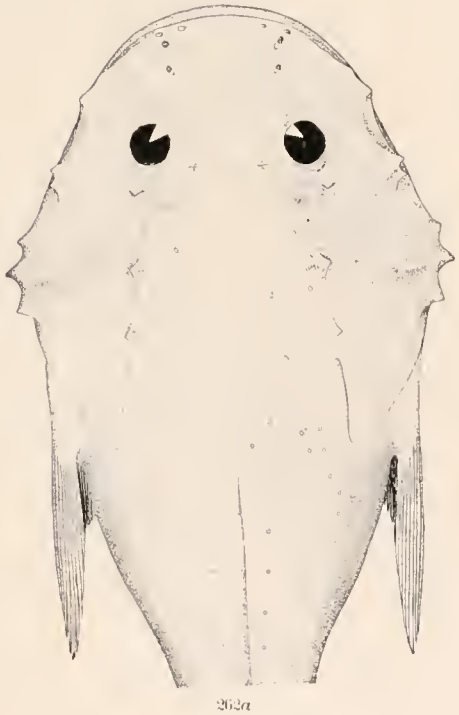
257. Cottunculus microps. (p. 269.)
259. Podothecus decagonus. (p. 282.)

258. Cottunculus Thomsonii. (p. 270.)
260. Aspidophoroides monopterygius. (p. 283.)



261*a*

261*b*

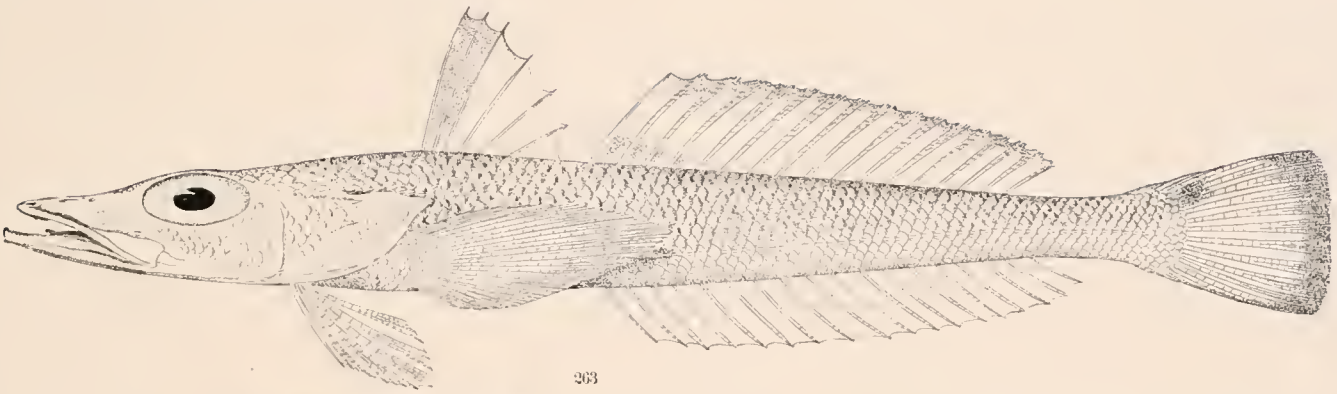


262*a*

262*b*

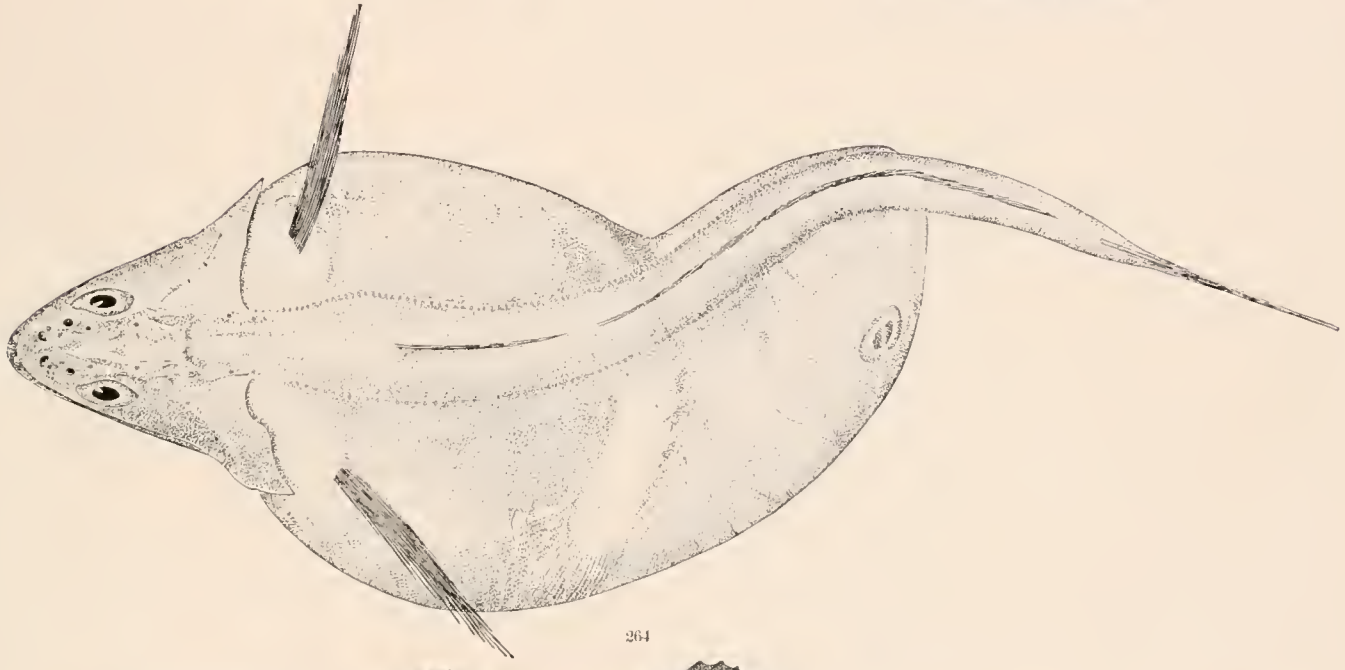
261*a*, *b*. COTTUNCULUS MICROPS. (p. 269.)

262*a*, *b*. COTTUNCULUS THOMSONII. (p. 270.)

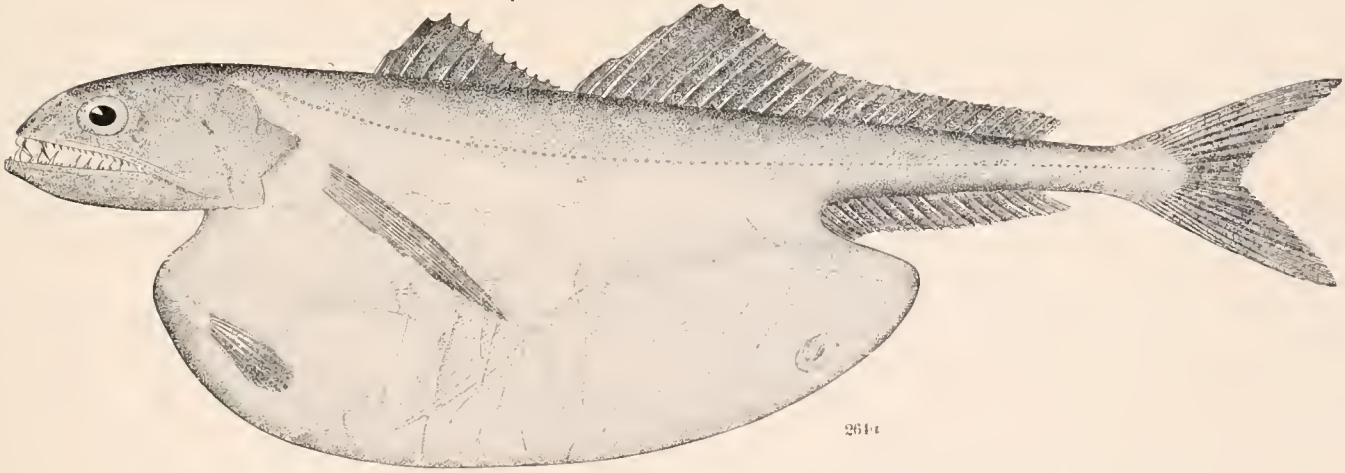


263

263*a*



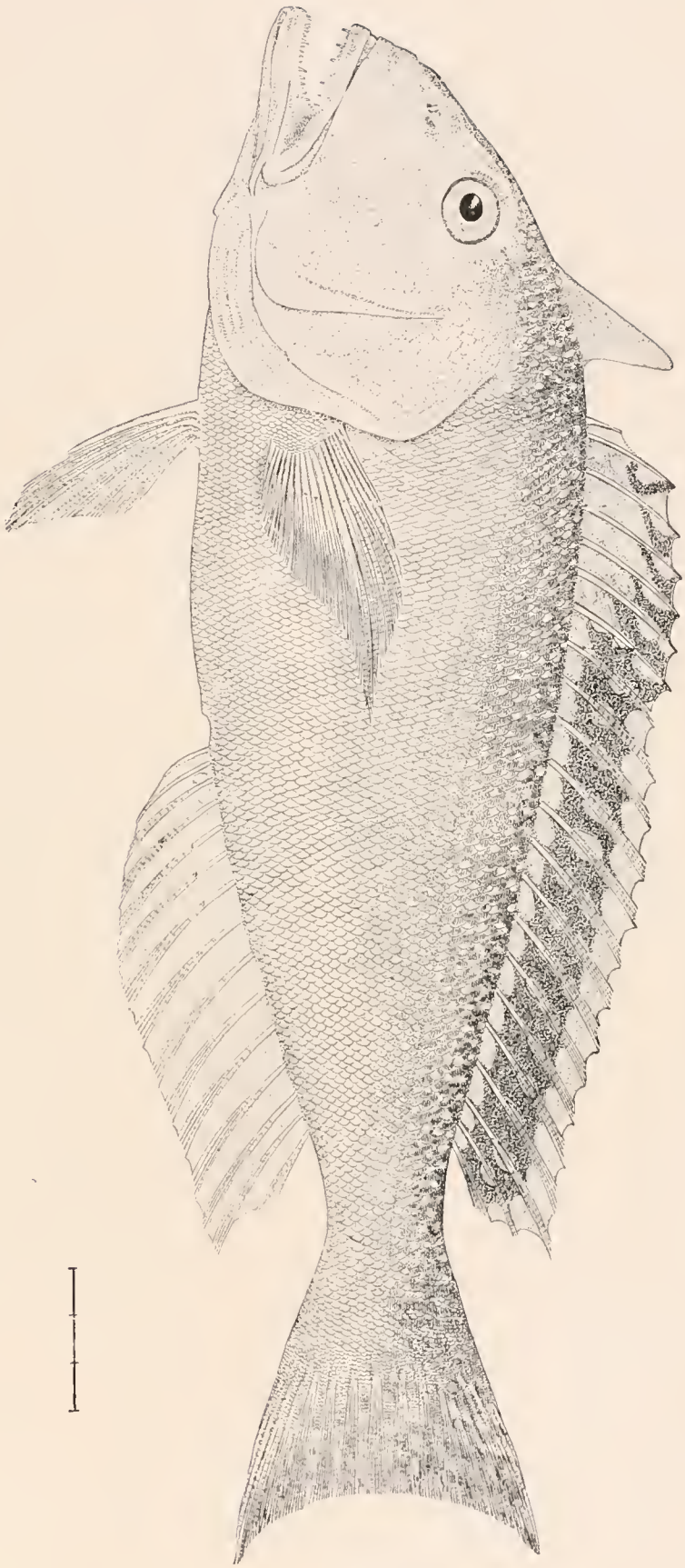
264



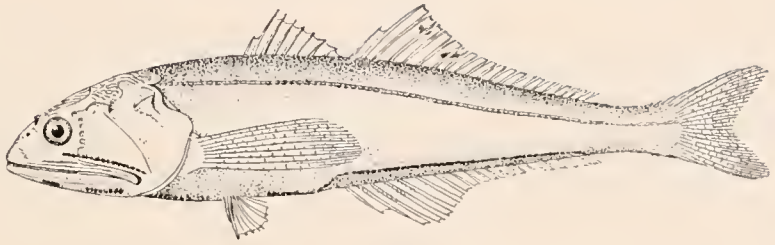
264*a*

263, 263*a*, *b*. HYPSICOMETES GOBIOIDES. (p. 290.)

264, 264*a*. CHIASMODON NIGER. (p. 292.)



265. LOPHOLATILUS CHAMÆLEONTICEPS. (p. 284.)



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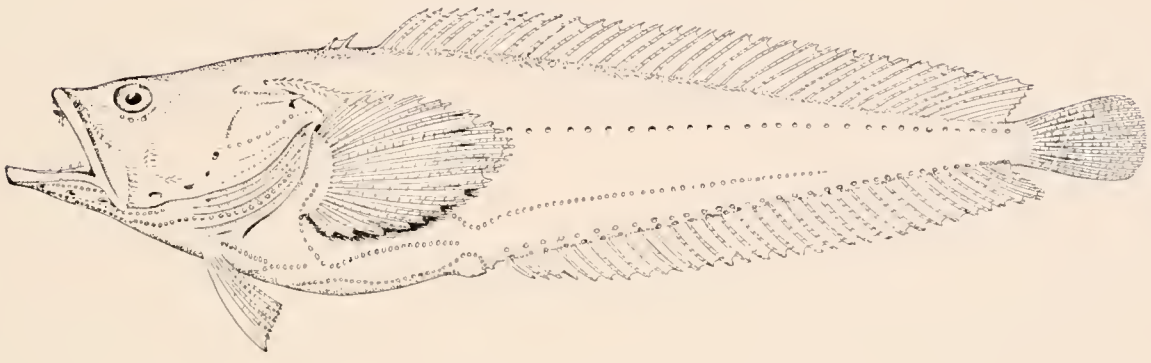

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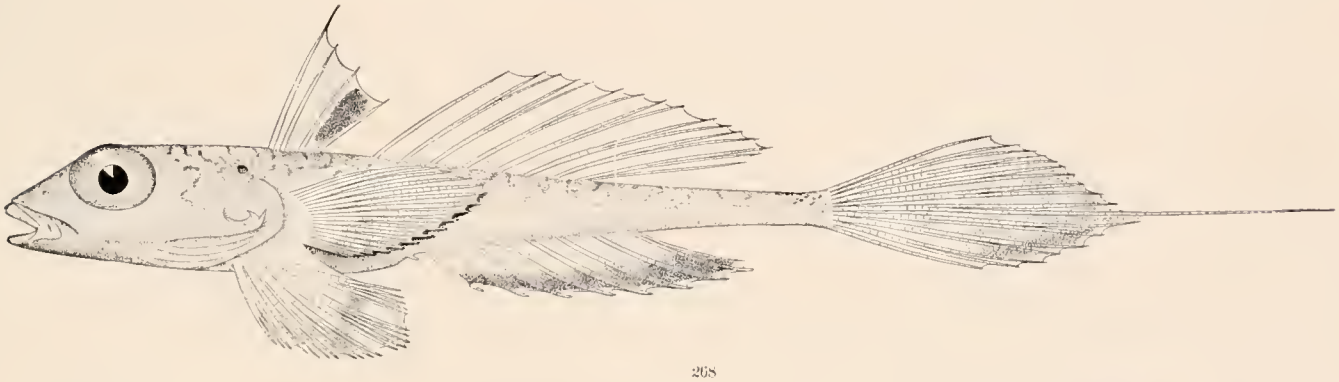
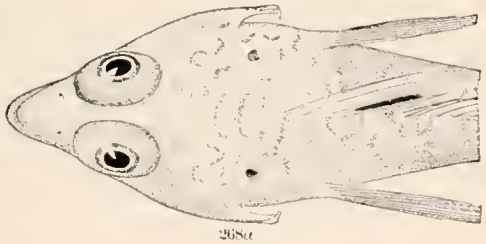
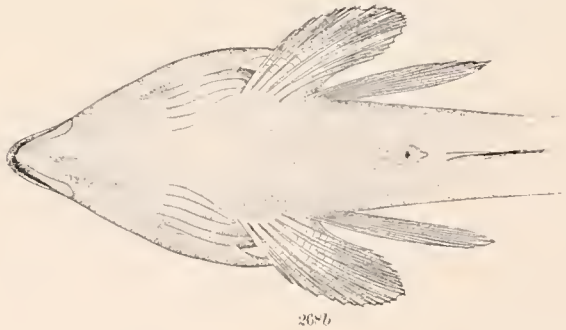


268

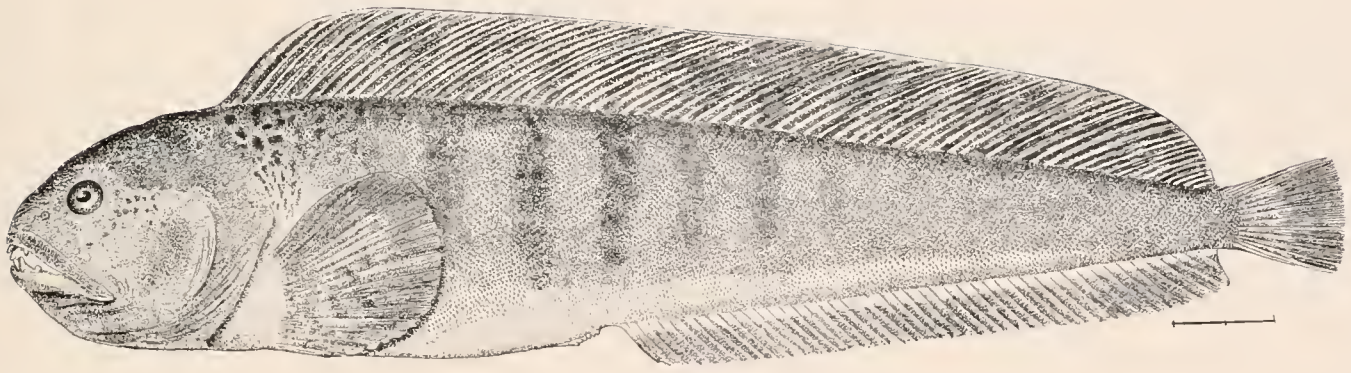


268*a*



268*b*

266. Pseudoscopelus scriptus. (p. 292.) 267. Porichthys porosissimus. (p. 294.)
268, 268*a*, *b*. Callionymus himantophorus. (p. 296.)



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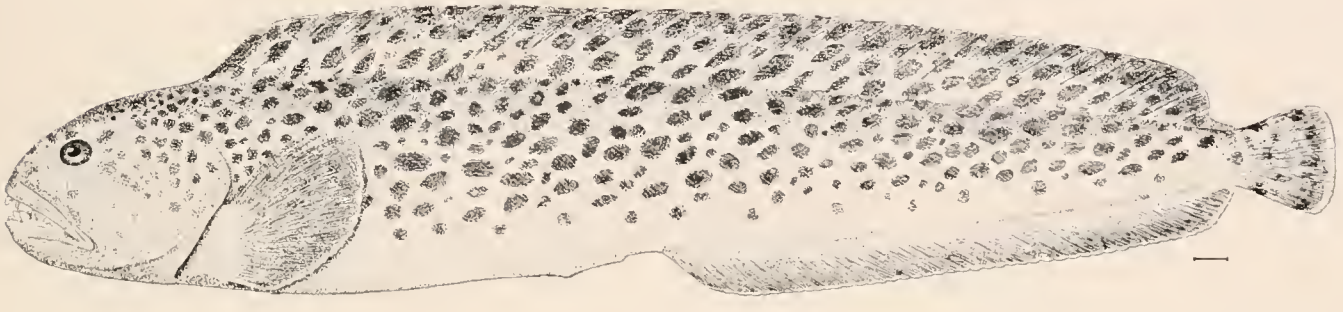
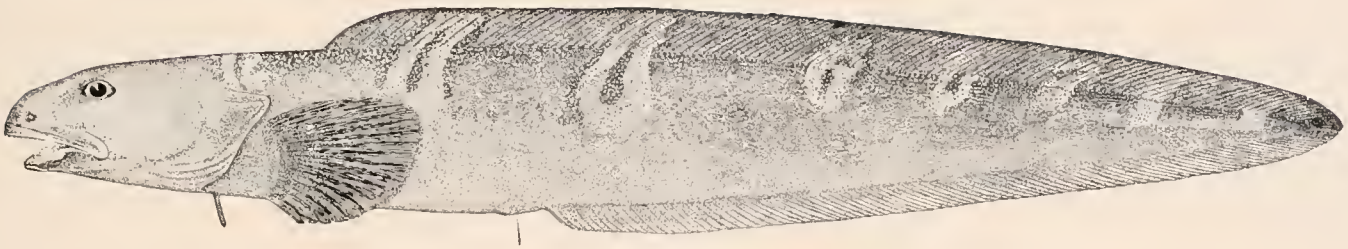


270

271

269. ANARRHICHAS LUPUS. (p. 299.) 270. ANARRHICHAS MINOR. (p. 301.)
271. ANARRHICHAS LATIFRONS. (p. 301.)



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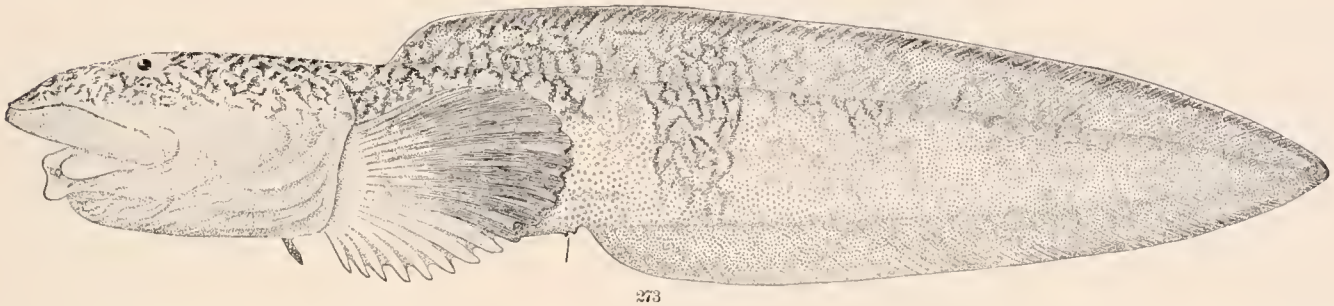
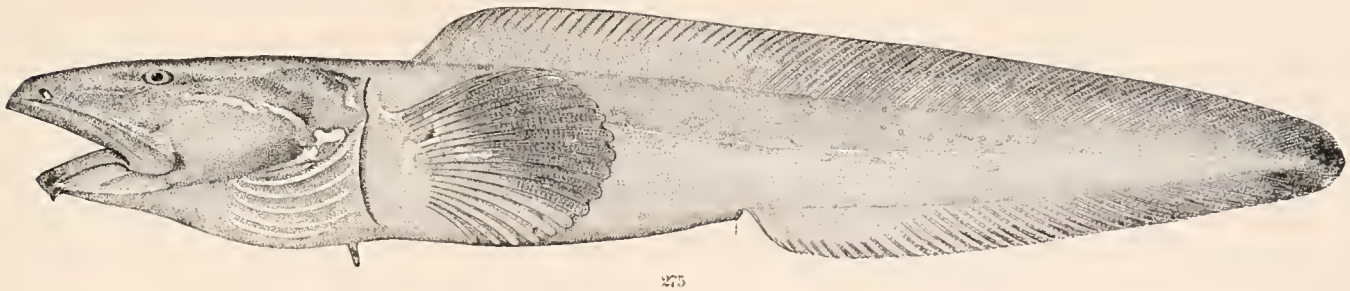


273

274

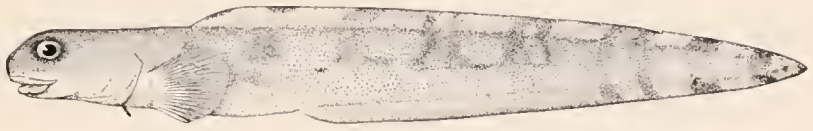


275

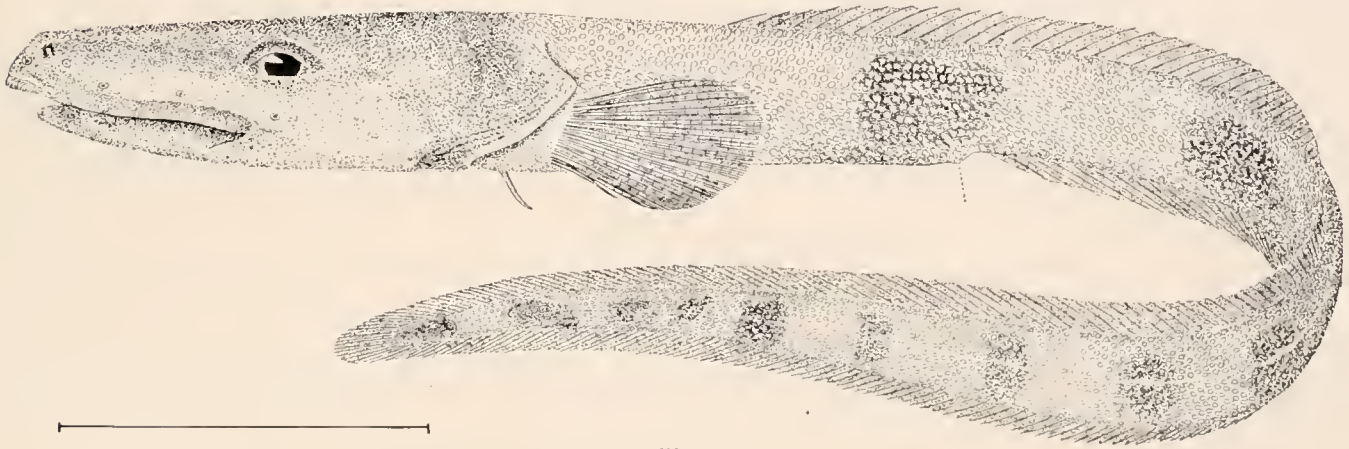
272. Lycodes Esmarkii. (p. 303.)
271. Lycodes frigidus. (p. 305.)

273. Lycodes reticulatus. (p. 305.)
275. Lycodes mucosus. (p. 306.)

276



276*a*



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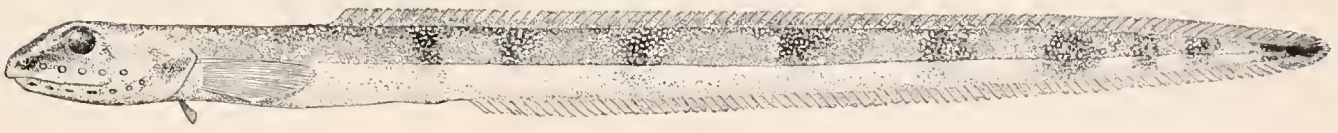


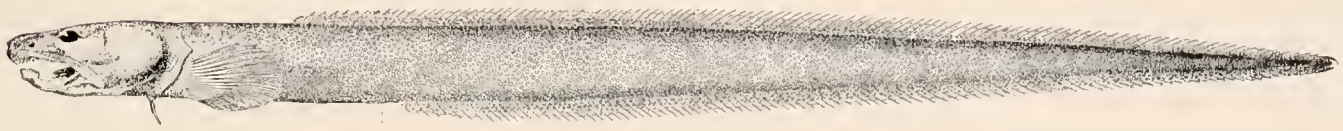
277*a*

276, 276*a*. Lycodes zoarchus. (p. 308.)

277, 277*a*. Lycenchelys Verrillii. (p. 309.)

278

278*a*



279

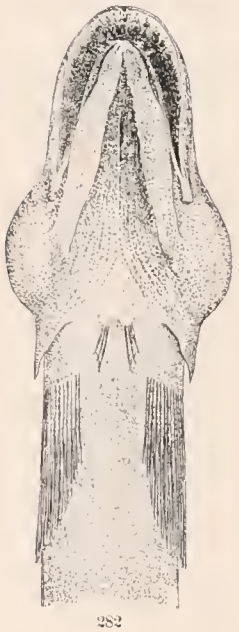
279*a*

280

278, 278*a*. Lycodes perspicillum. (p. 307.)
279, 279*a*. Lycenchelys paxillus. (p. 311.)
280. Lycodonus mirabilis. (p. 312.)

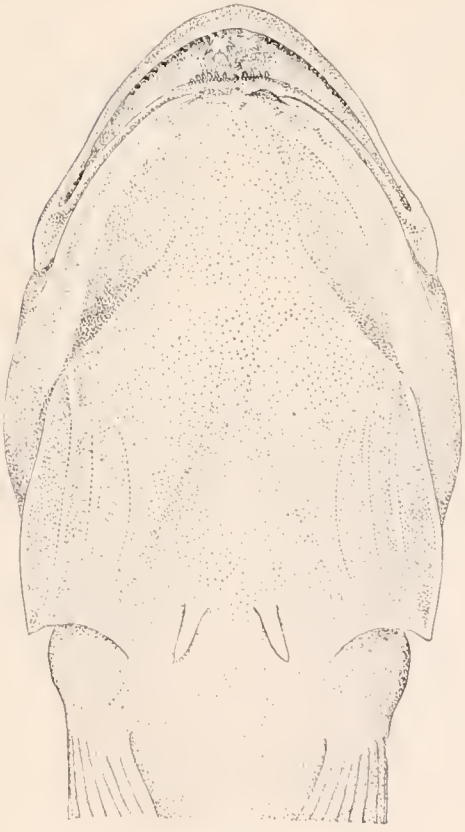
281*a*

281*b*



282

283*a*

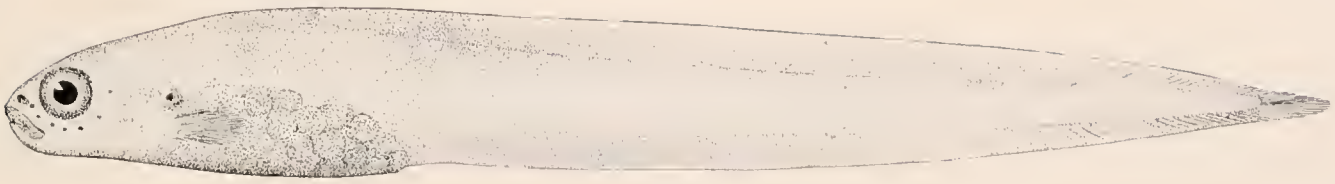


283*b*

283*c*

281*a*, *b*. Lycodes reticulatus. (p. 305.)
283*a*, *b*. Lycodes mucosus. (p. 306.)

282. Lycenchelys paxillus. (p. 311.)
283*c*. Lycodes zoarchus. (p. 308.)



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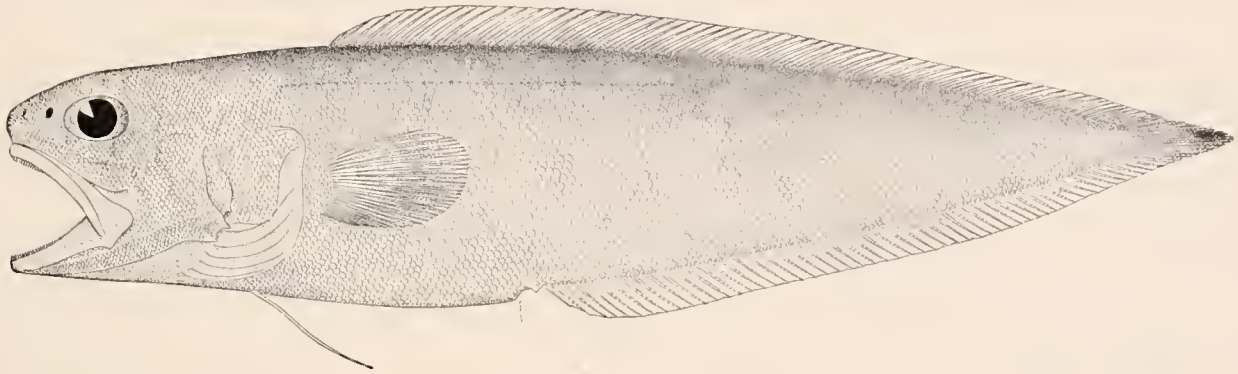

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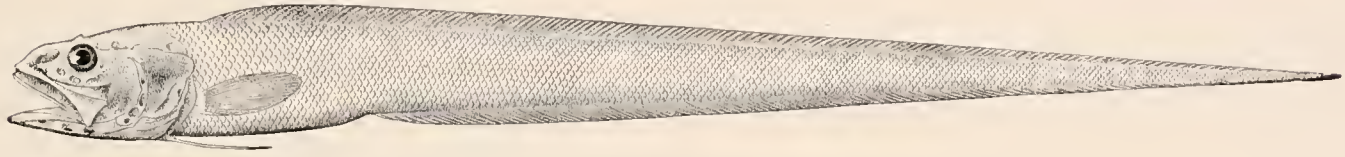

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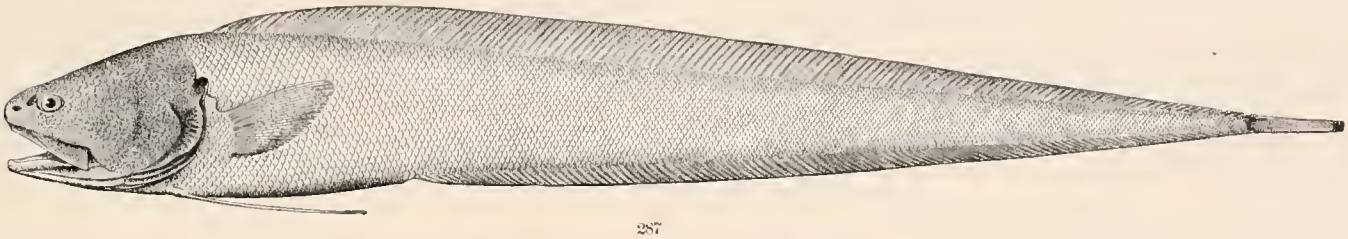

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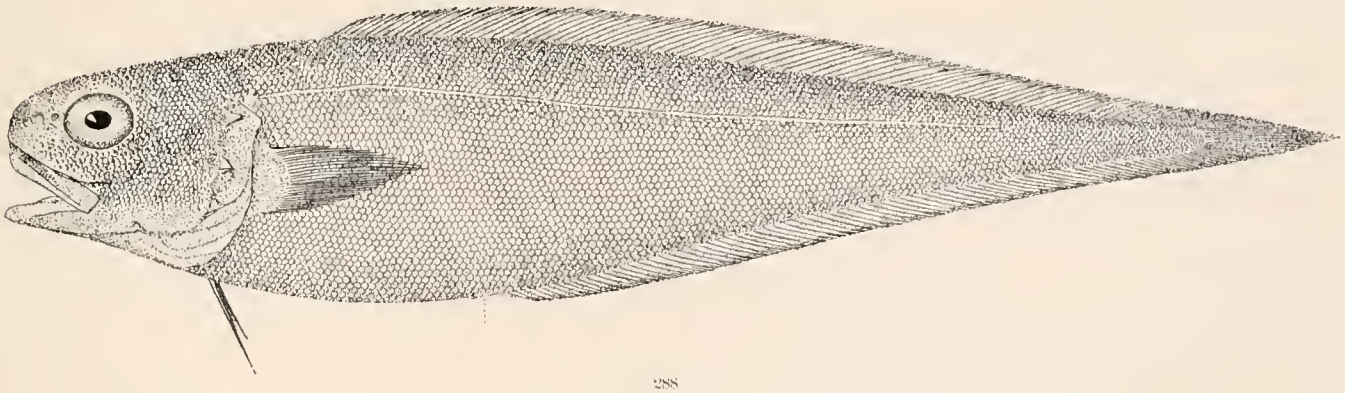
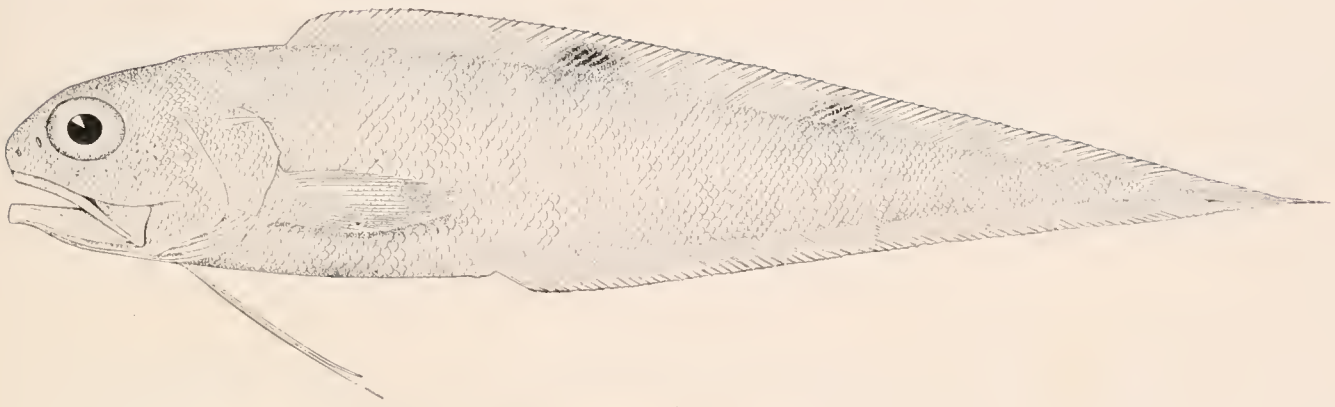


288

284. Melanostigma gelatinosum. (p. 314.)
285. Dicromita Agassizii. (p. 319.)
286. Bassozetus catena. (p. 323.)
287. Bassozetus normalis. (p. 322.)
288. Benthocometes robustus. (p. 327.)



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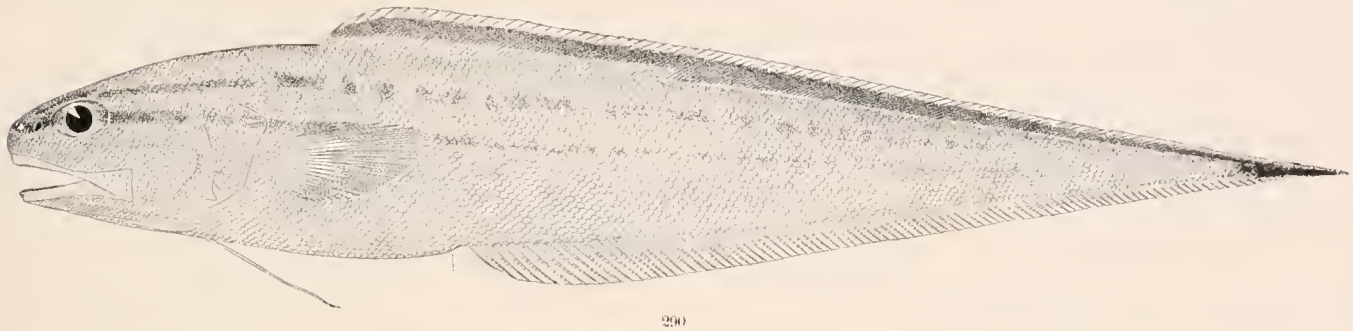

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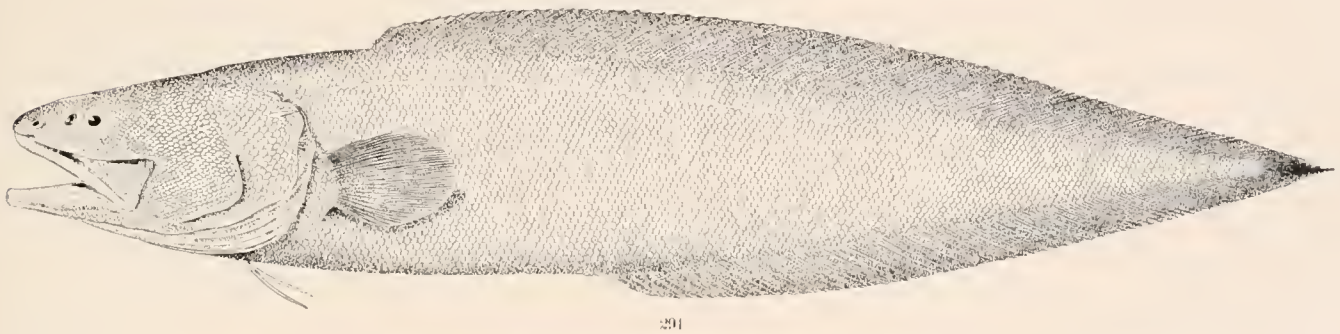

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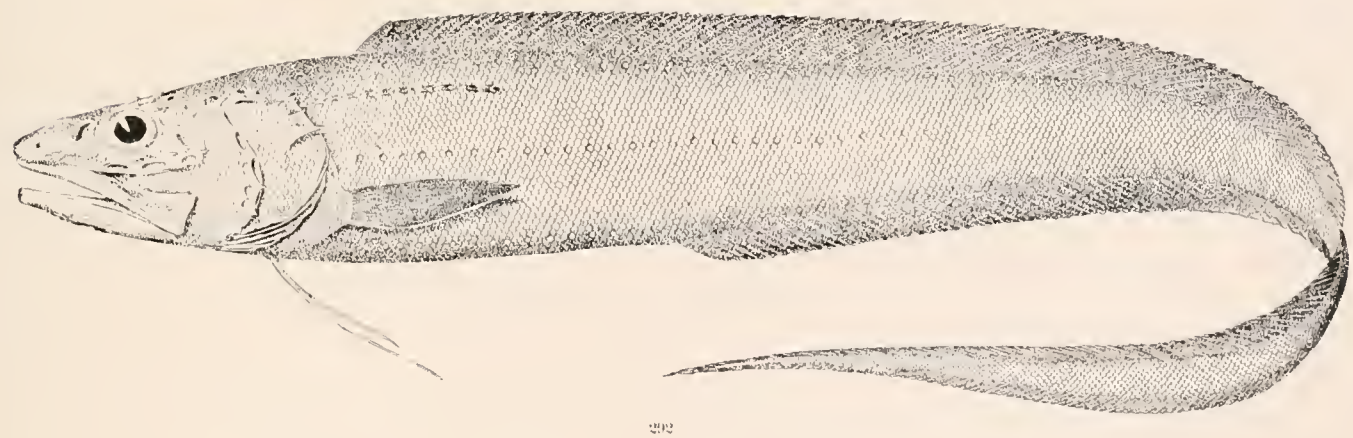
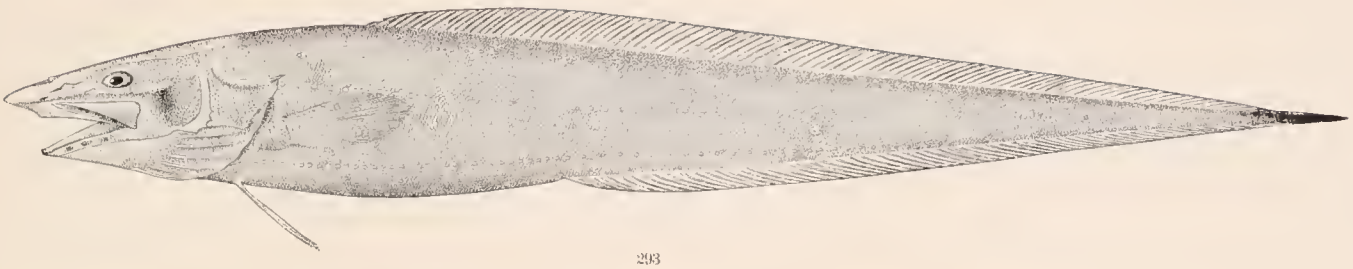


292

289. Neobythites Gilli. (p. 325.)
290. Neobythites marginatus. (p. 326.)
291. Bassogigas Gilli. (p. 328.)
292. Porogadus miles. (p. 334.)



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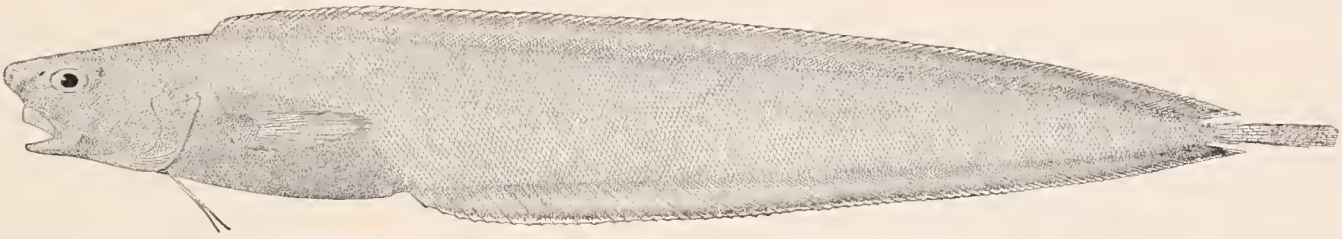

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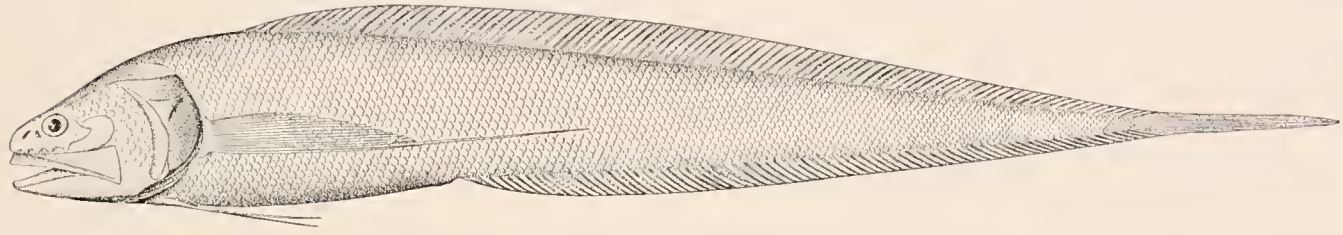

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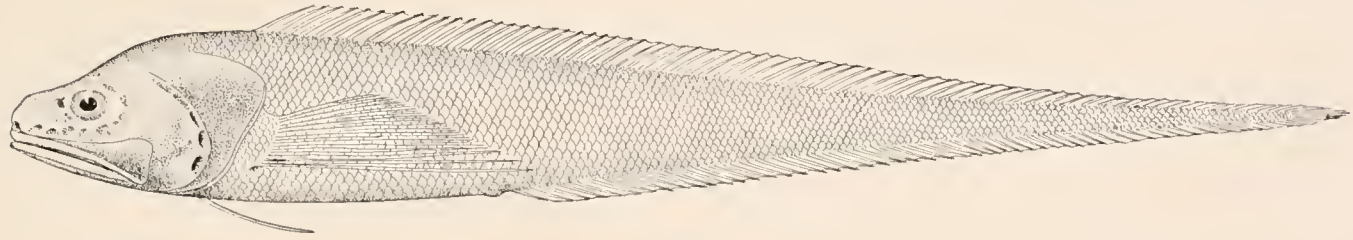
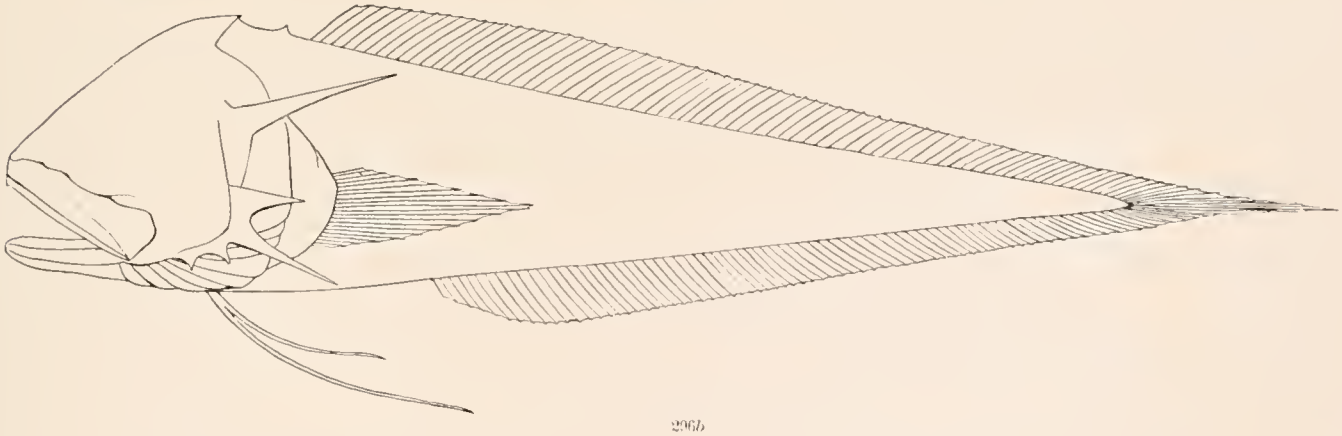


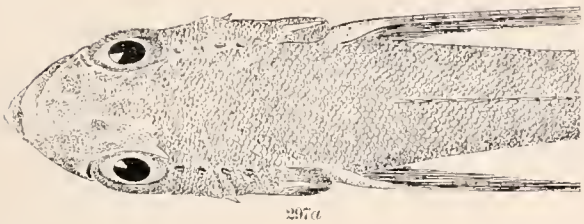
296*a*



296*b*

293. Penopus Macdonaldi. (p. 336.)
294. Barathrodemus manatinus. (p. 332.)
295. Nematonus pectoralis. (p. 333.)
296*a*. Mixonus laticeps. (p. 339.)
296*b*. Tauredophidium Hextii. (p. 336.)

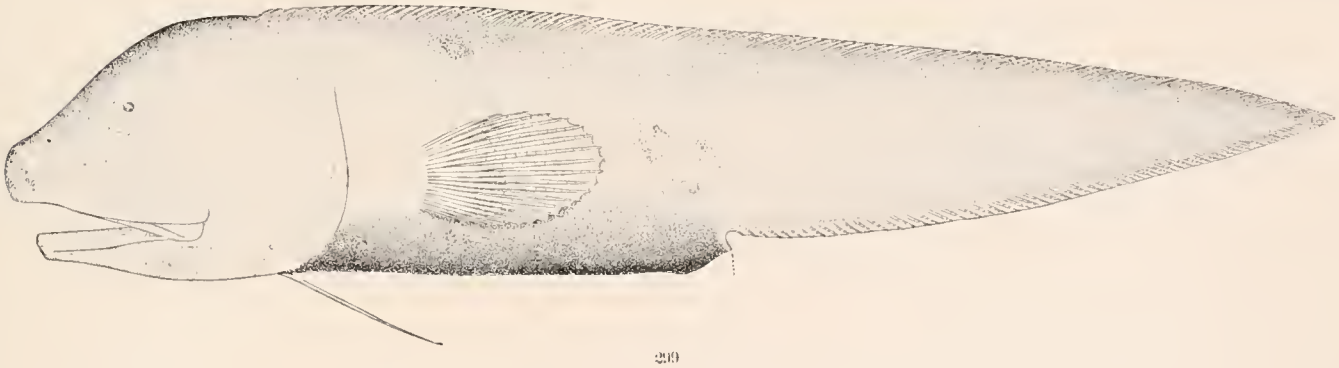
297



297*a*

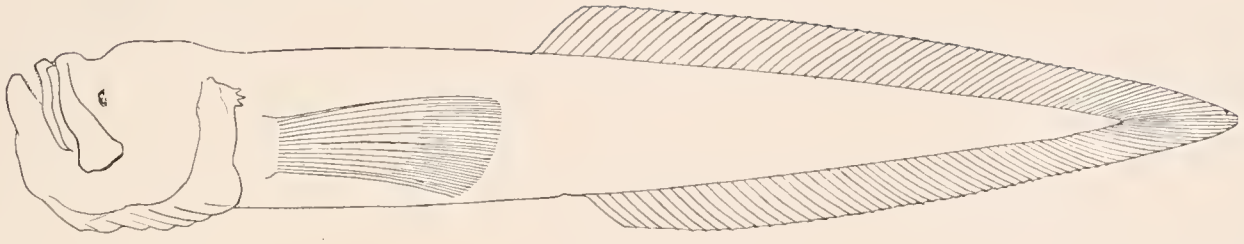
297*b*

298



299

297, 297*a*, *b*. Dicrolene intronigra. (p. 338.)
298. Barathronus bicolor. (p. 341.)
299. Aphyonus mollis. (p. 342.)



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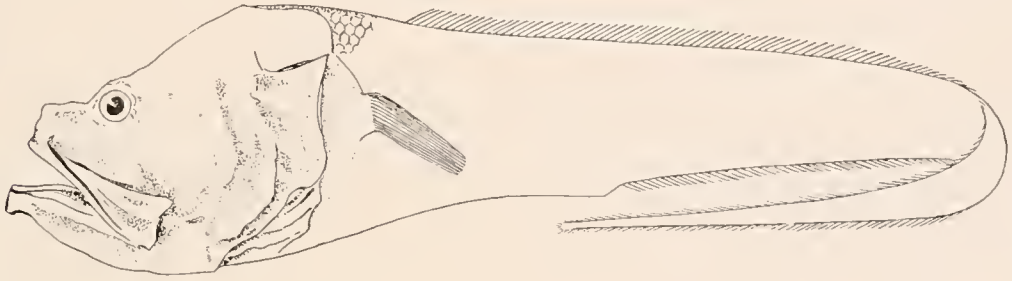
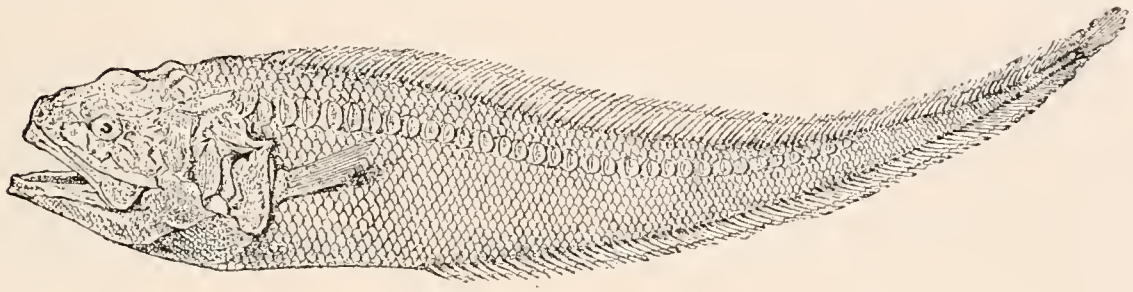


301



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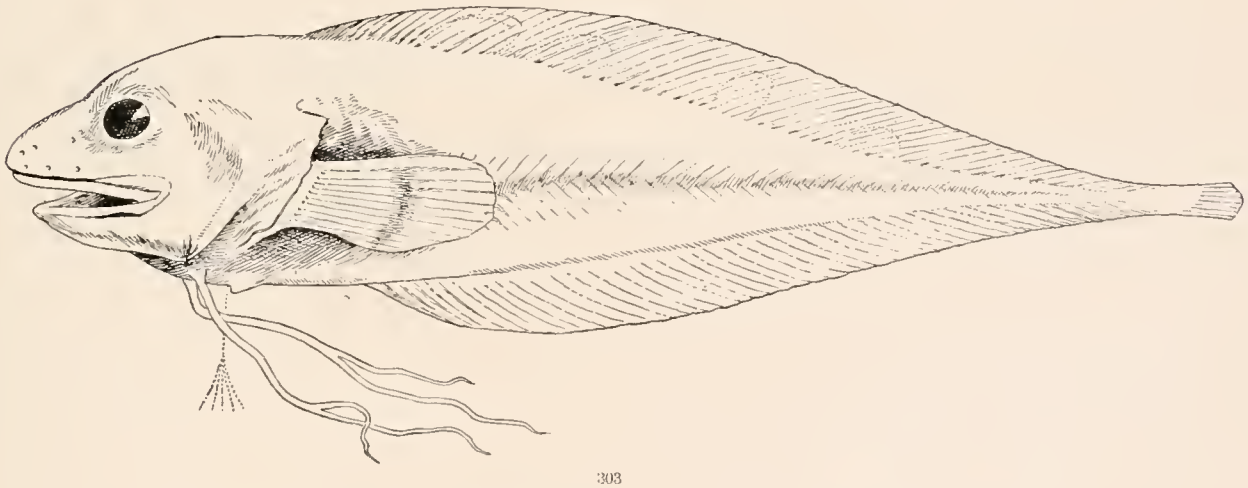
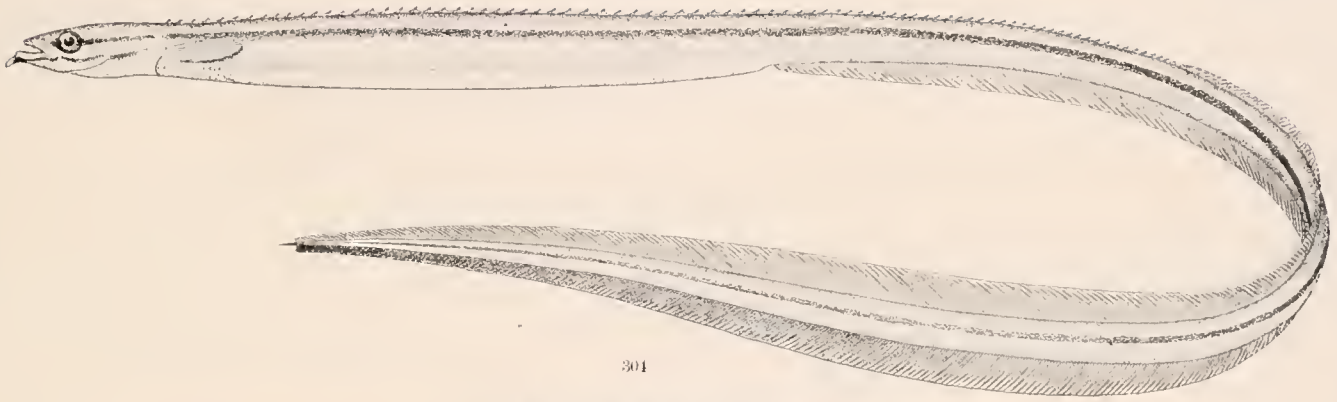


303

300. Alexeterion parfaiti. (p. 343.)
302. Lamprogrammus niger. (p. 344.)

301. Hephthocara simum. (p. 344.)
303. Rhodichthys regina. (p. 342.)



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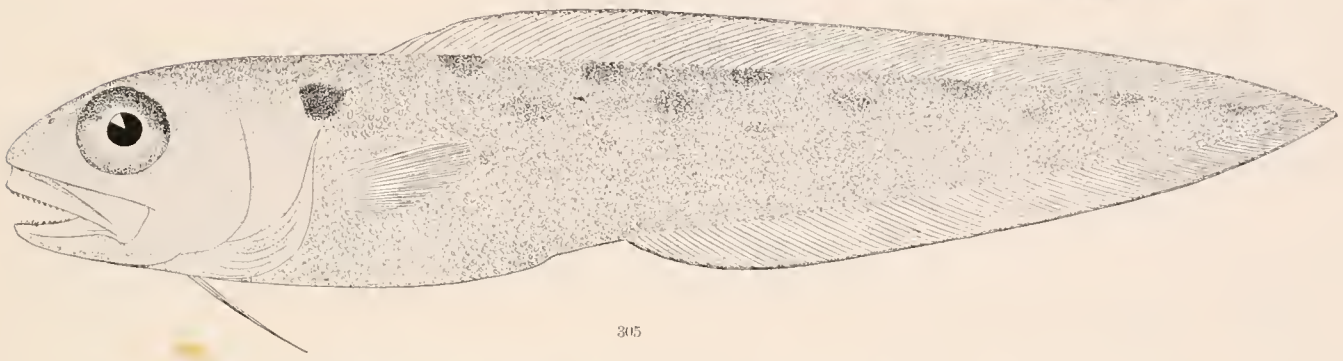

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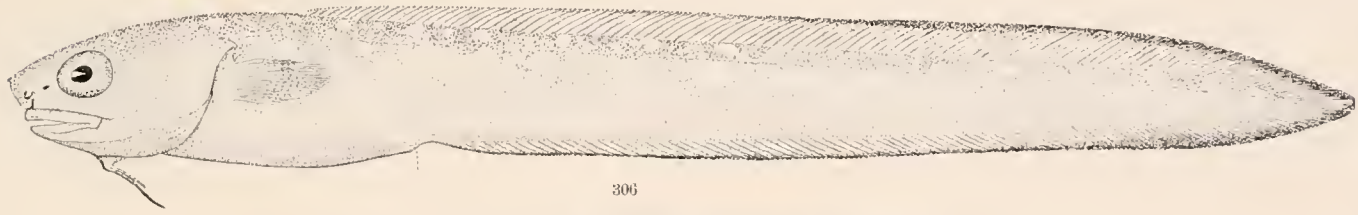

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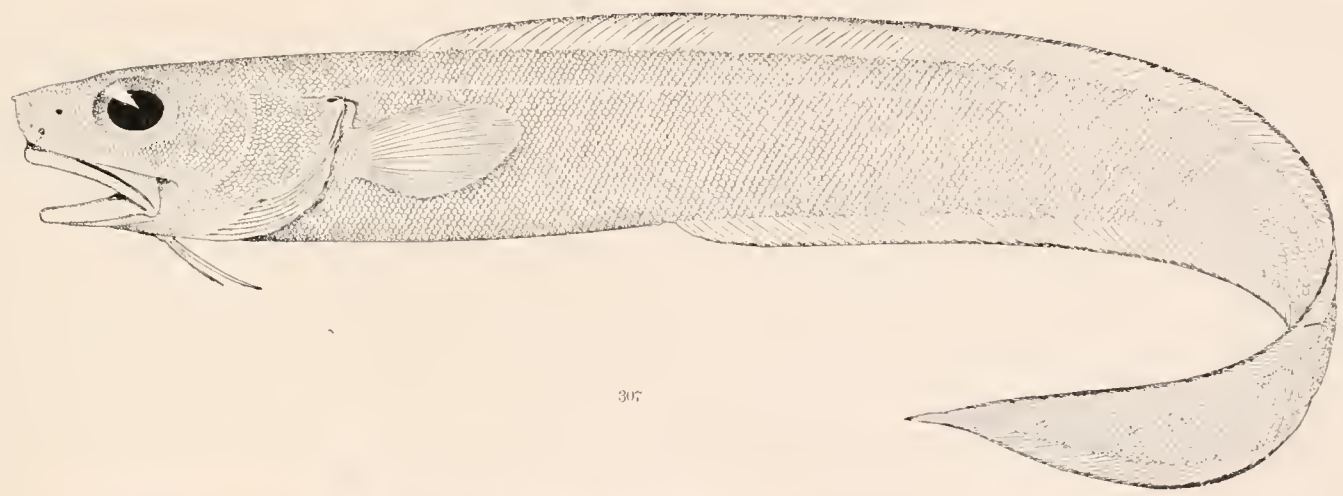
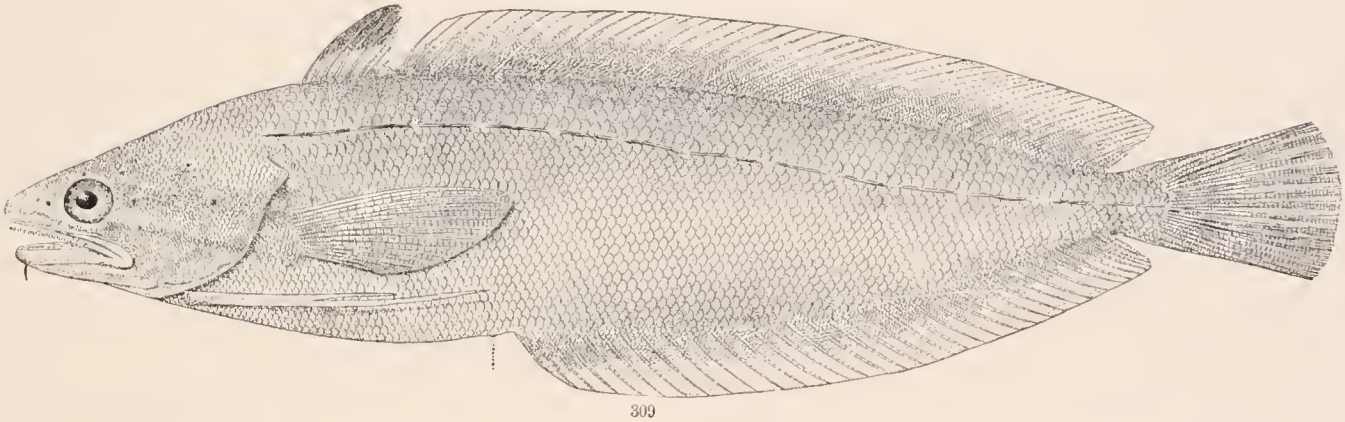


307

308

301. Ptilichthys Goodei. (p. 302.)
306. Leptophidium cervinum. (p. 346.)
305. Otophidium omostigma (p. 345.)
307. Leptophidium profundorum. (p. 347.)
308. Leptophidium marmoratum. (p. 348.)



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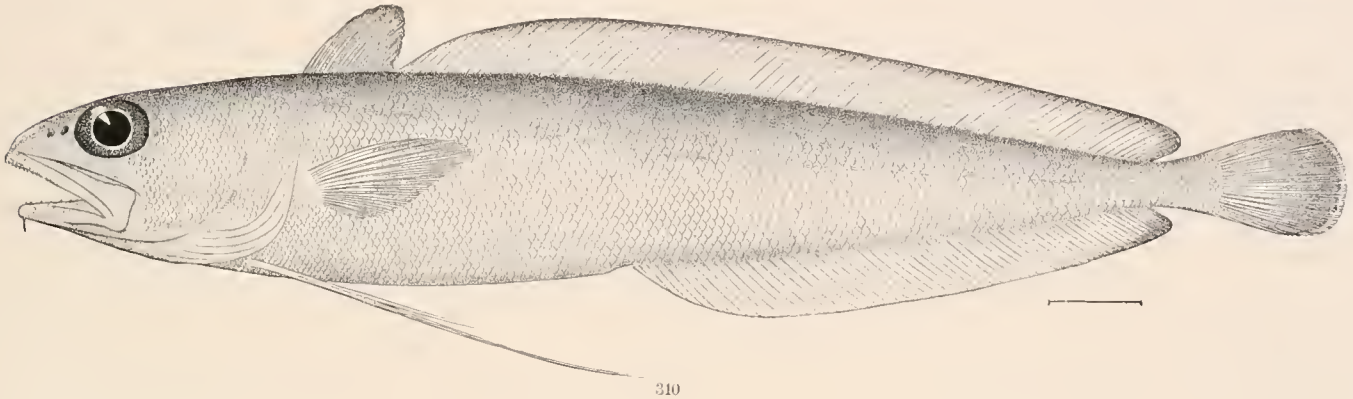

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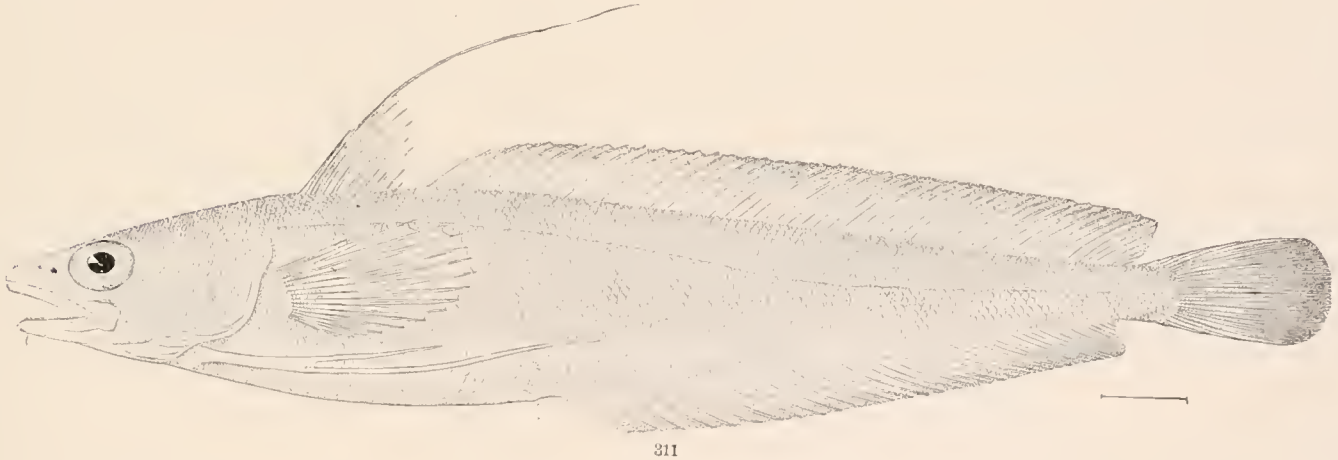
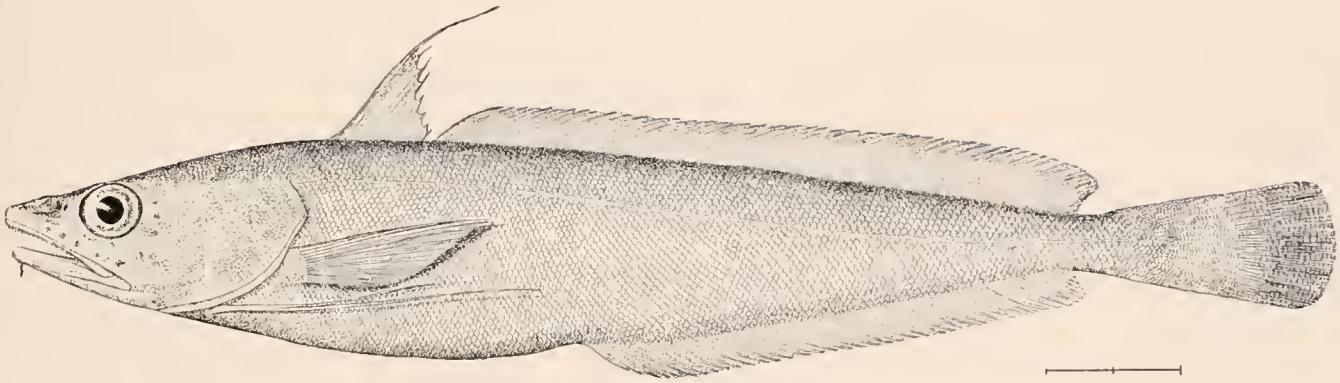


311

309. PHYCIS REGIUS. (p. 357.) 310. PHYCIS CIRRATUS. (p. 358.) 311. PHYCIS CHUSS. (p. 359.)



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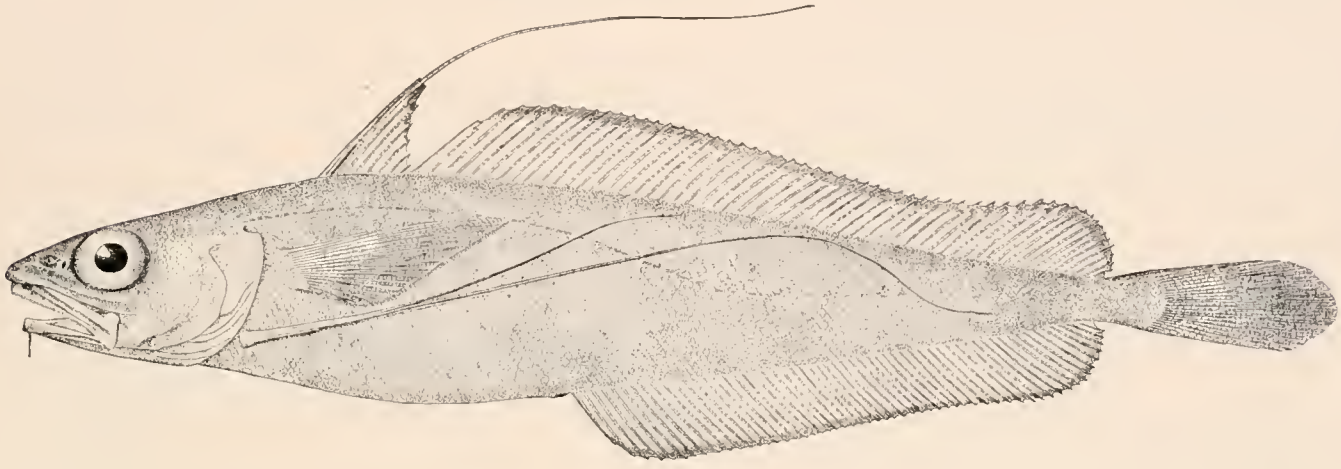

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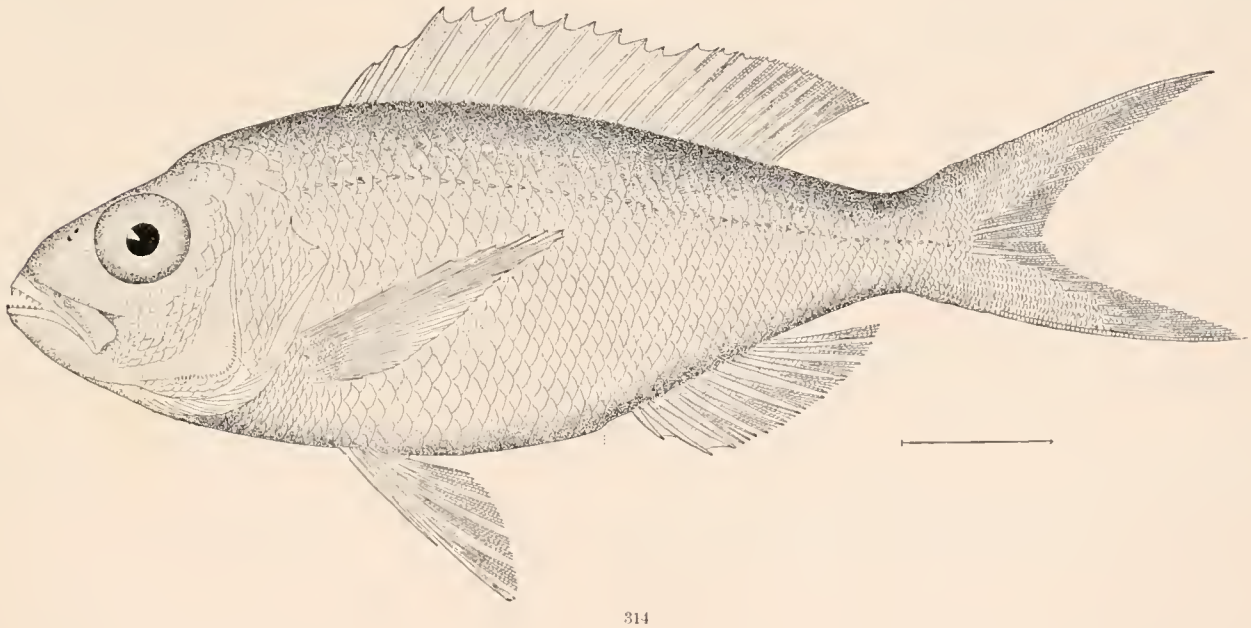
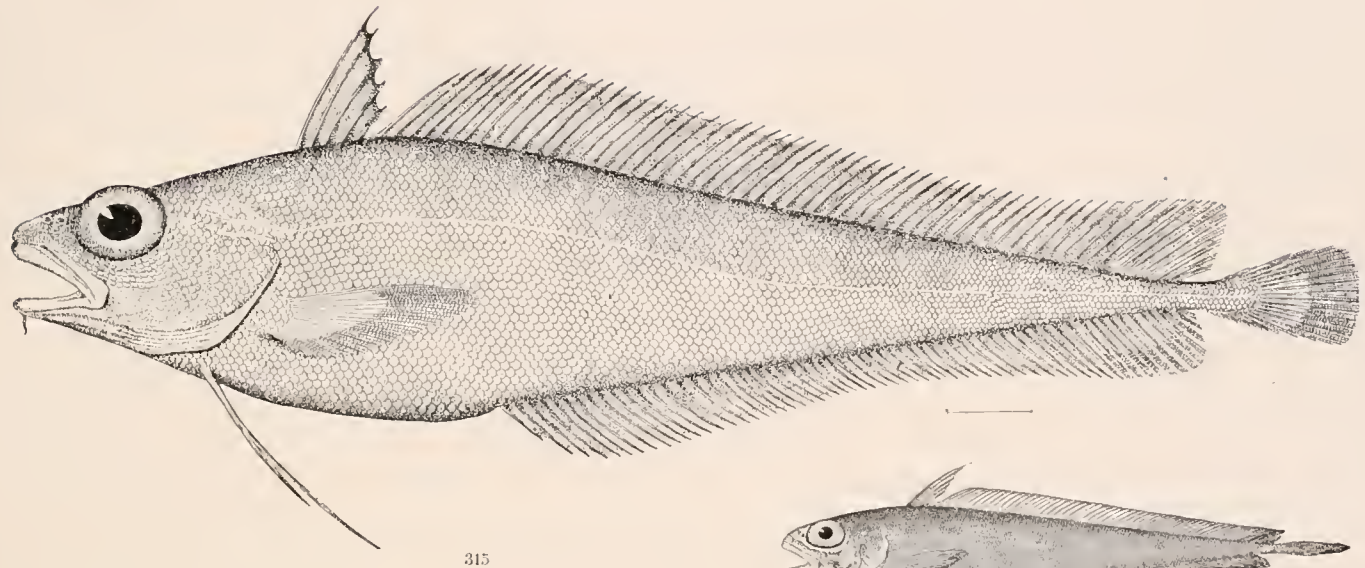


314

312. Phycis tenuis. (p. 359.) 313. Phycis Chesteri. (p. 360.) 314. Aprion macrophthalmus. (p. 239.)



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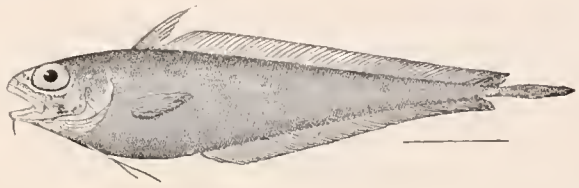
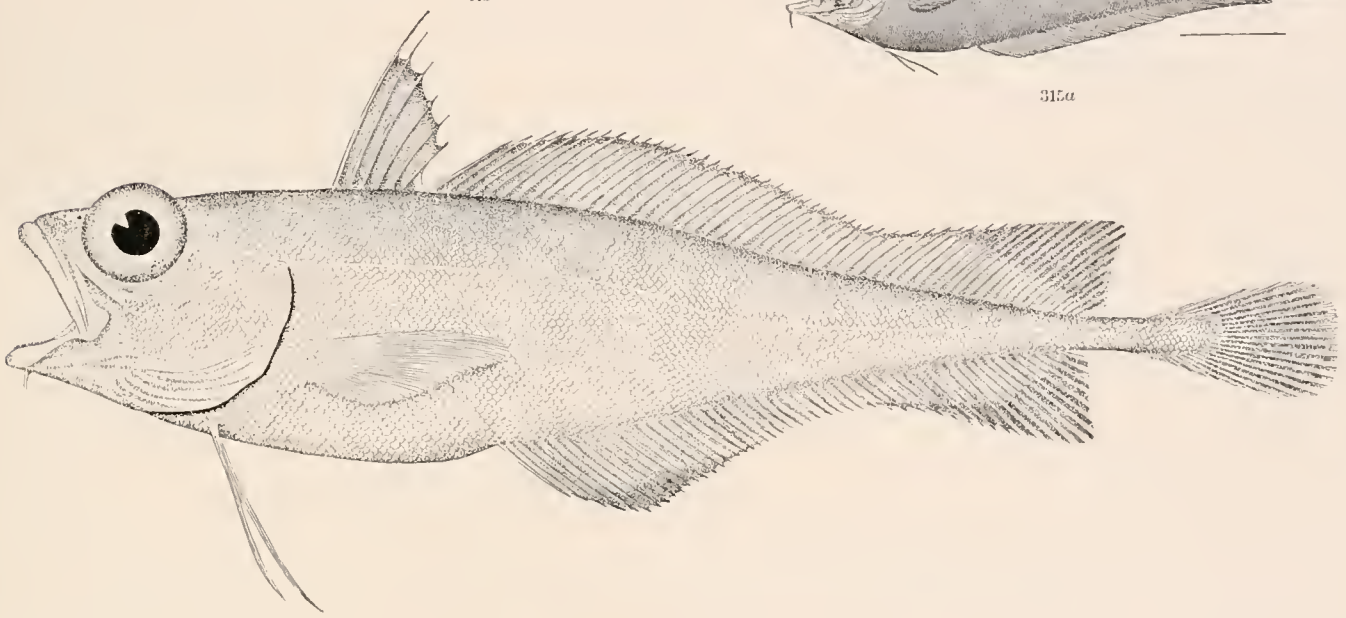


315*a*



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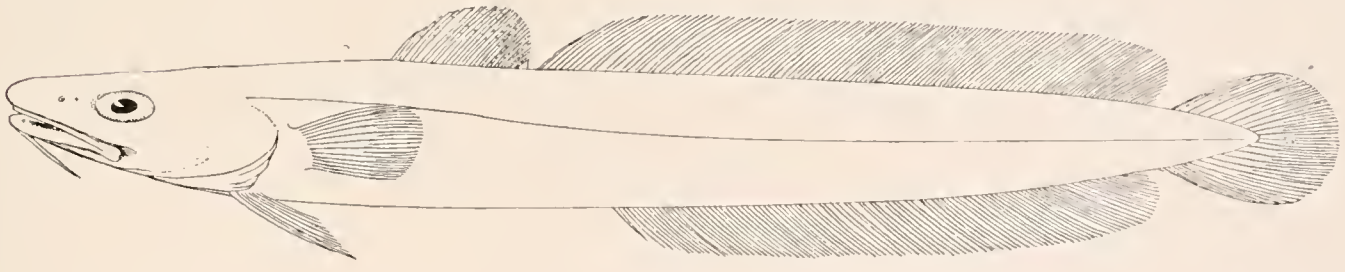
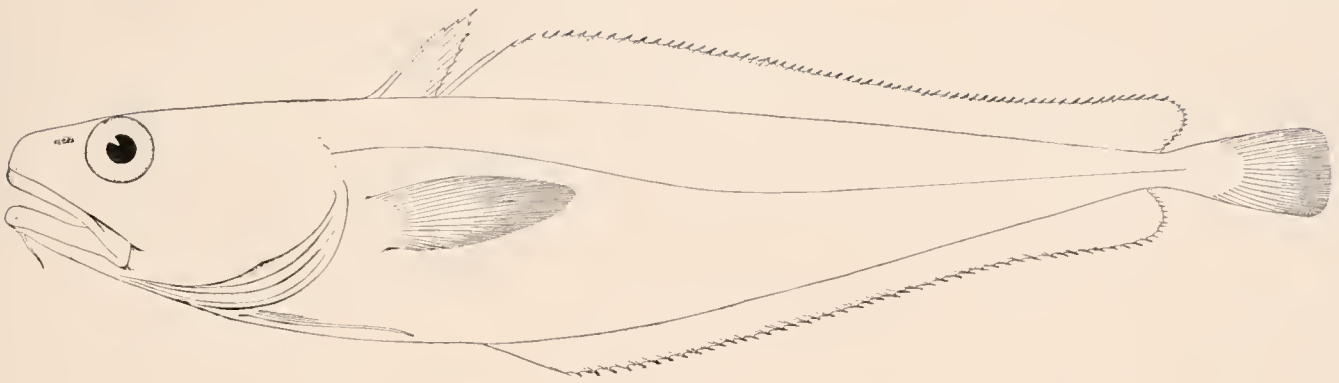


317

315, 315*a*. Læmonema barbatula. (p. 362.)
316. Læmonema melanurum. (p. 363.)
317. Molva vulgaris. (p. 361.)



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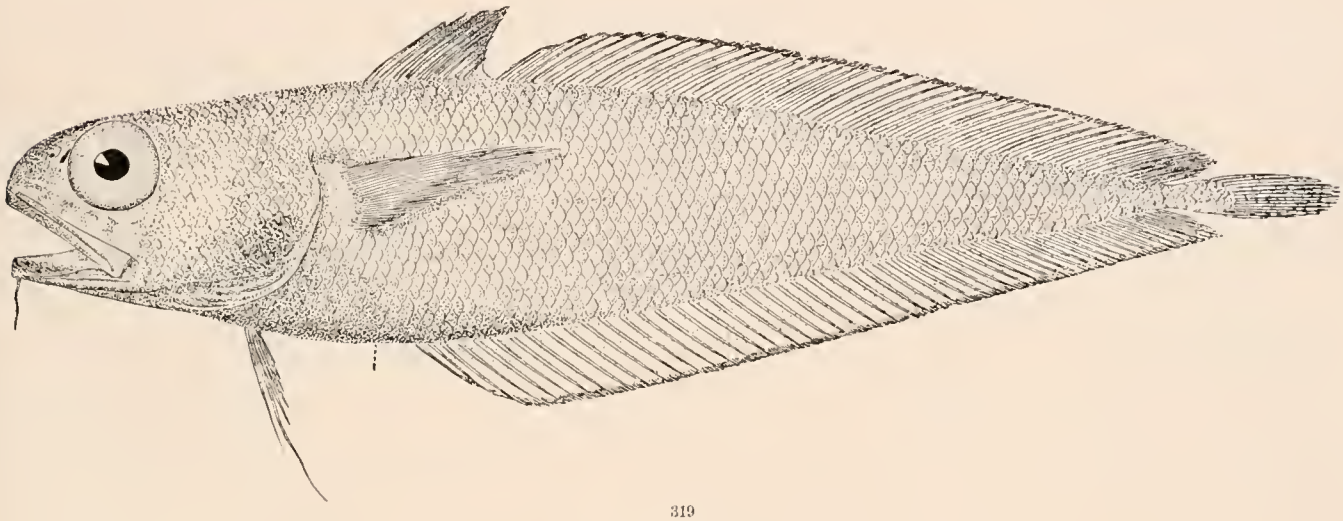

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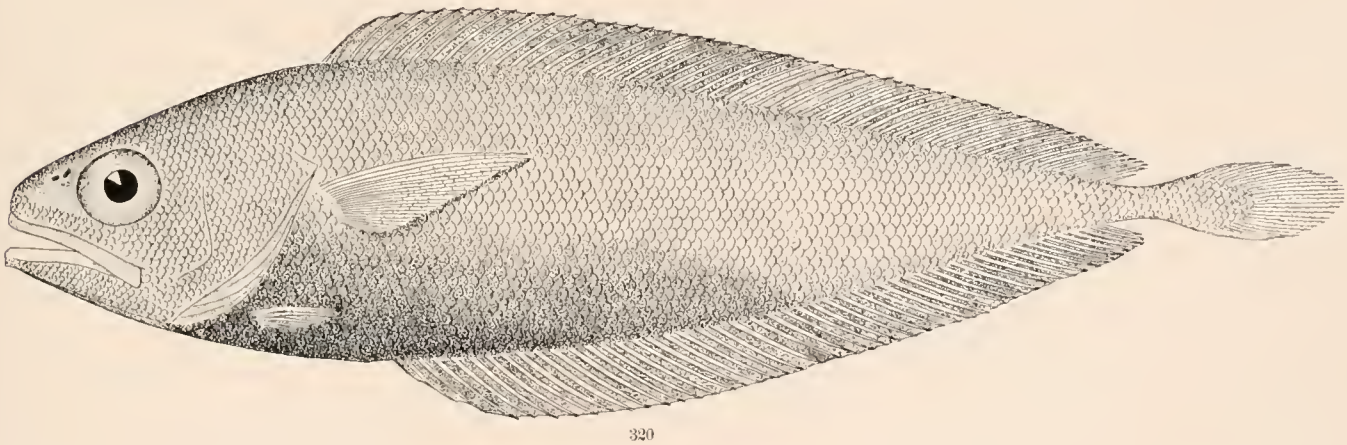
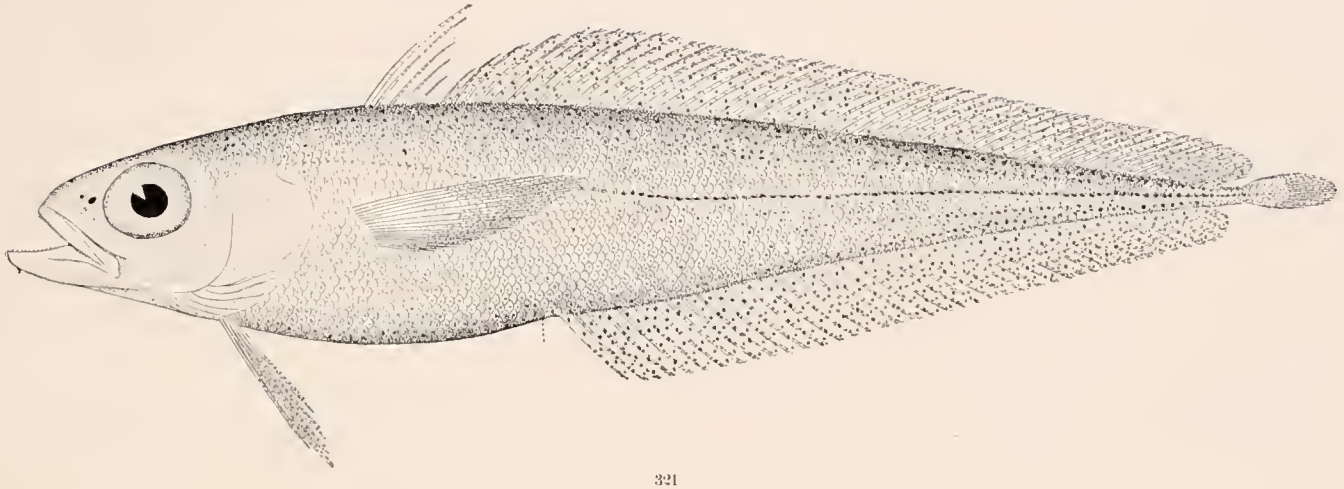


320

318. PHYSICULUS KAUPI. (p. 366.) 319. PHYSICULUS FULVUS. (p. 366.) 320. URALEPTUS MARALDI. (p. 367.)



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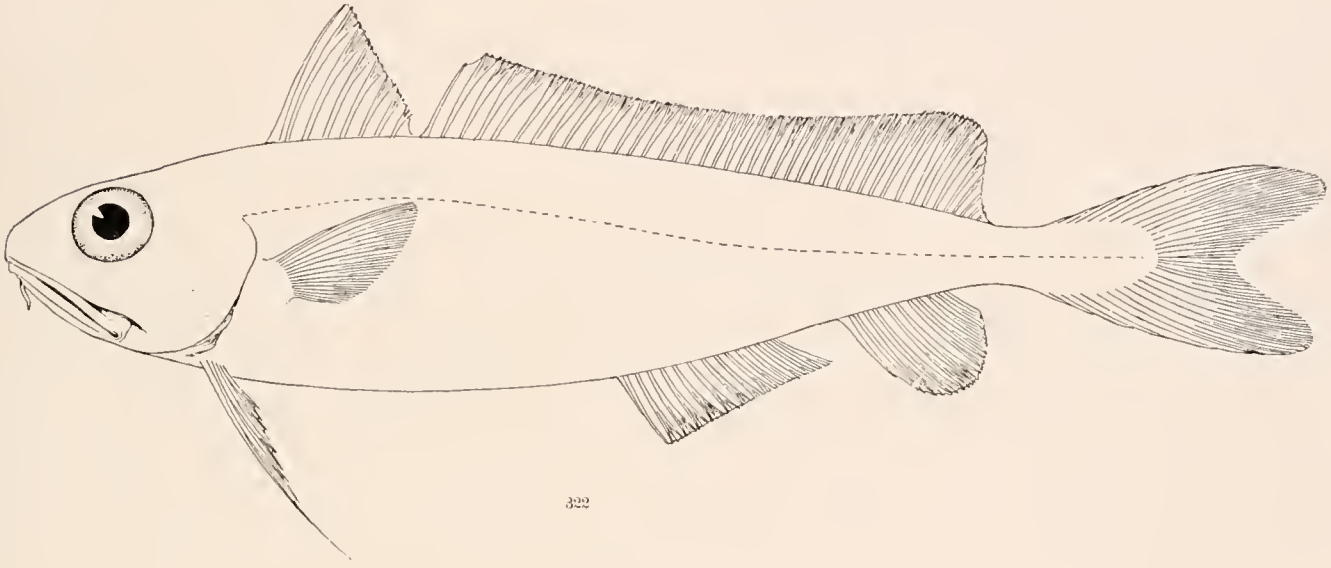
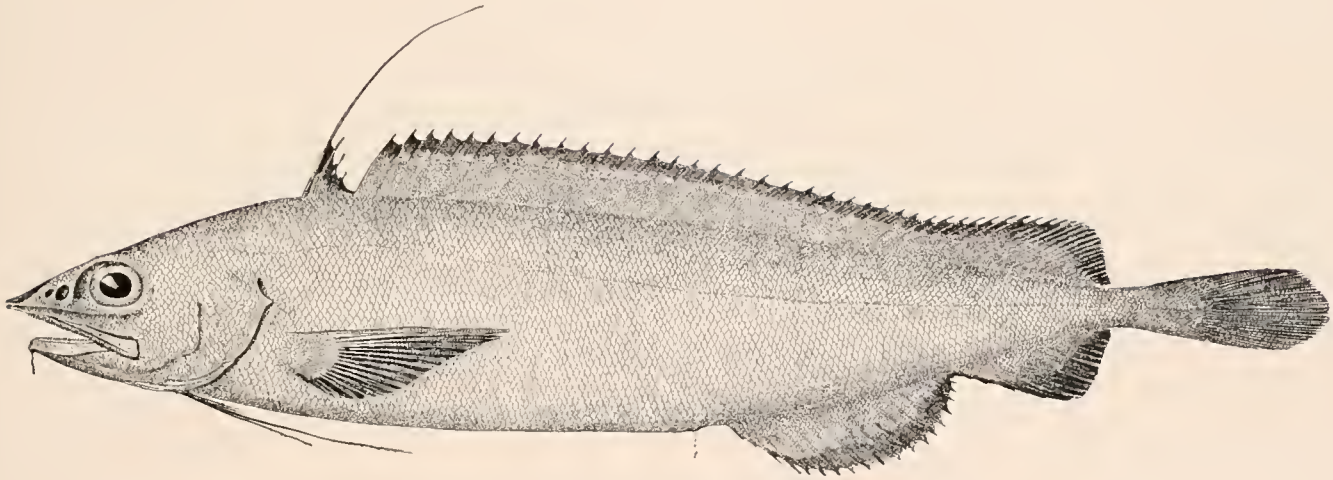


322

323

321. Lotella maxillaris. (p. 368.) 322. Mora mediterranea. (p. 369.) 323. Lepidion Rissoi. (p. 370.)



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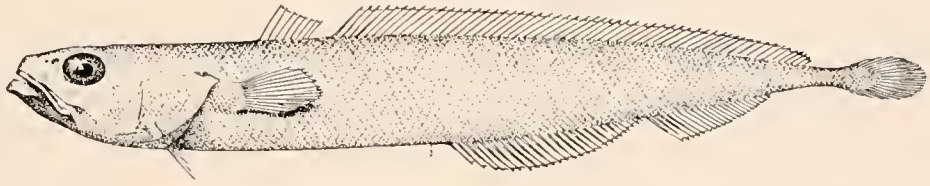

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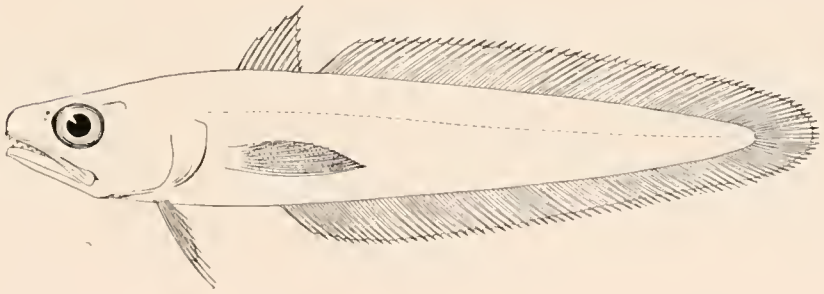
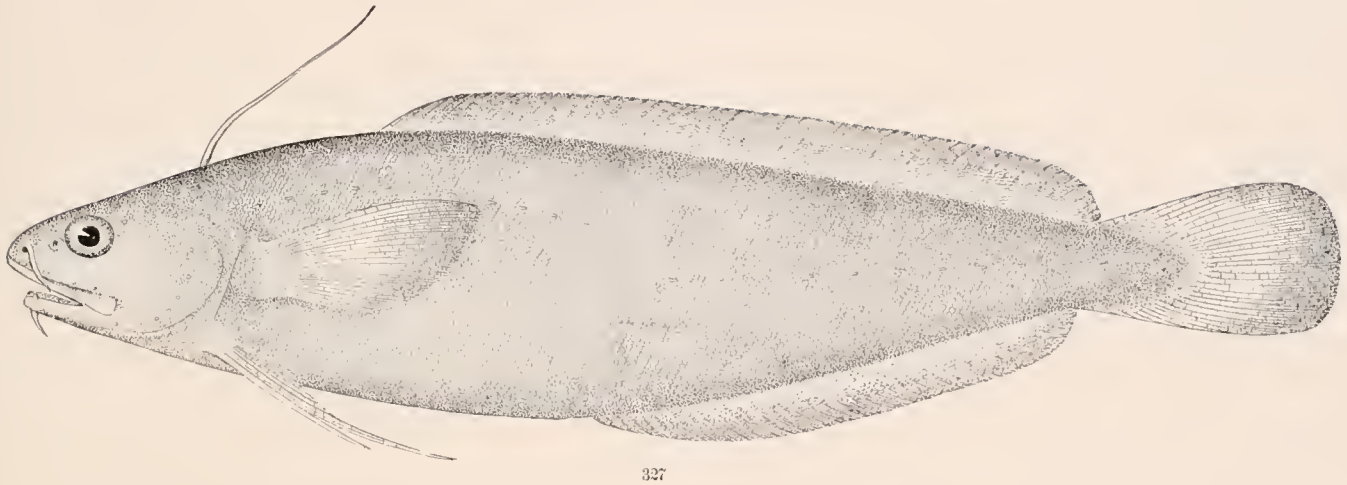


326

324. Antimora viola. (p. 372.) 325. Halargyreus brevipes. (p. 375.) 326. Strinsia tinca. (p. 380.)



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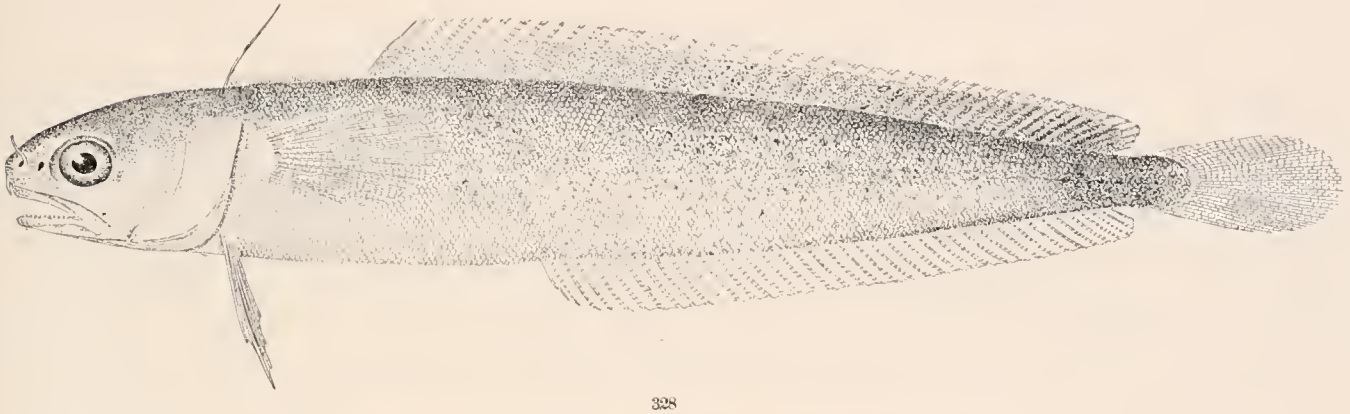
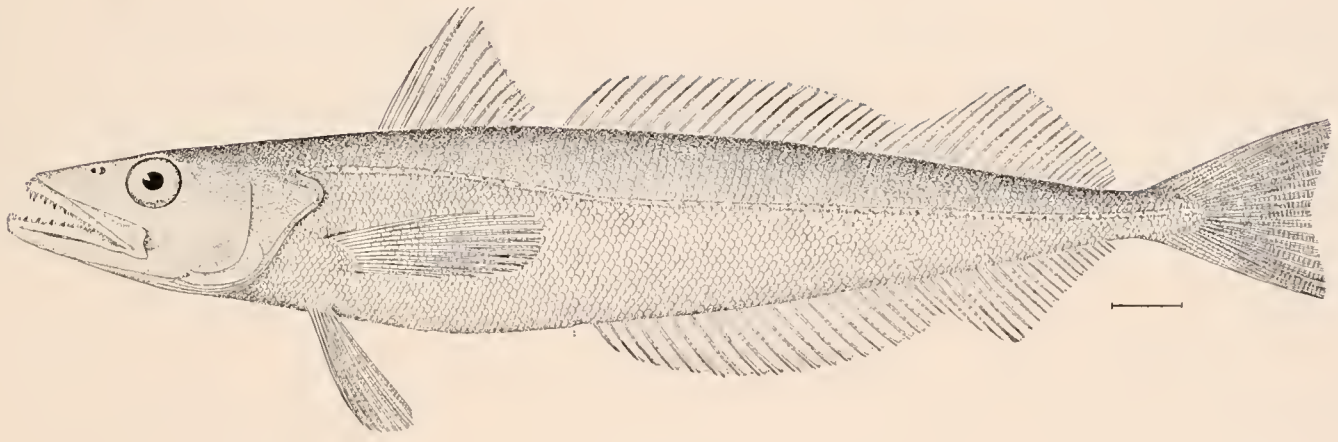


328

329

327. Onos ensis. (p. 381.) 328. Rhinonemus cimbrius. (p. 384.) 329. Brosmius brosme. (p. 385.)



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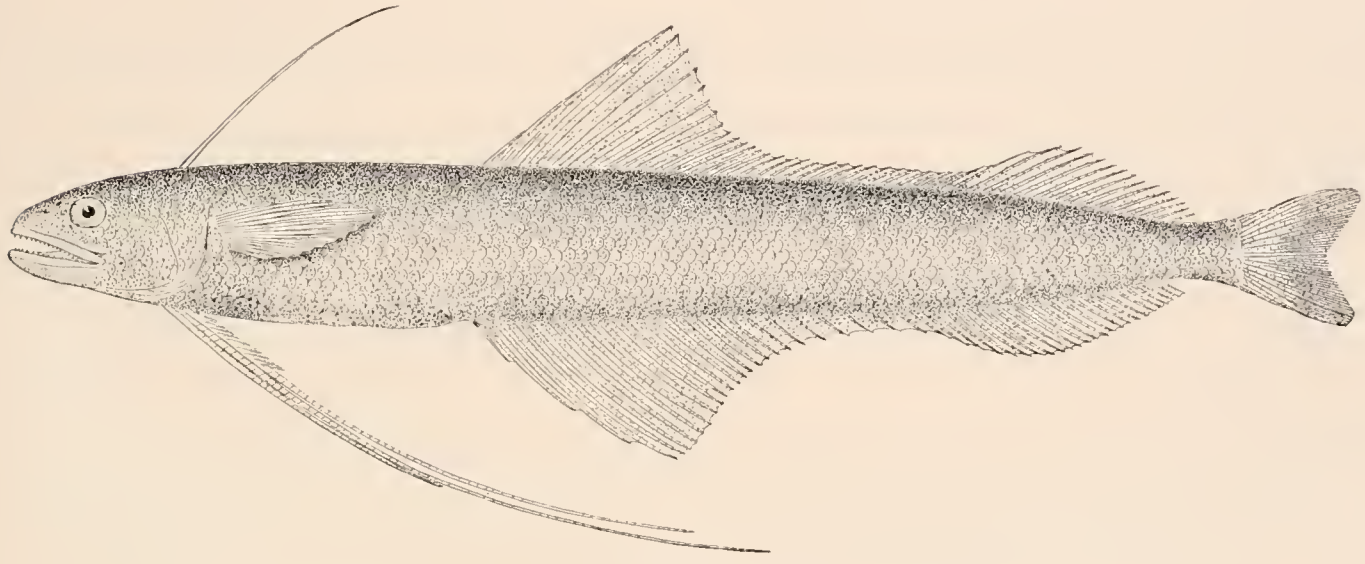
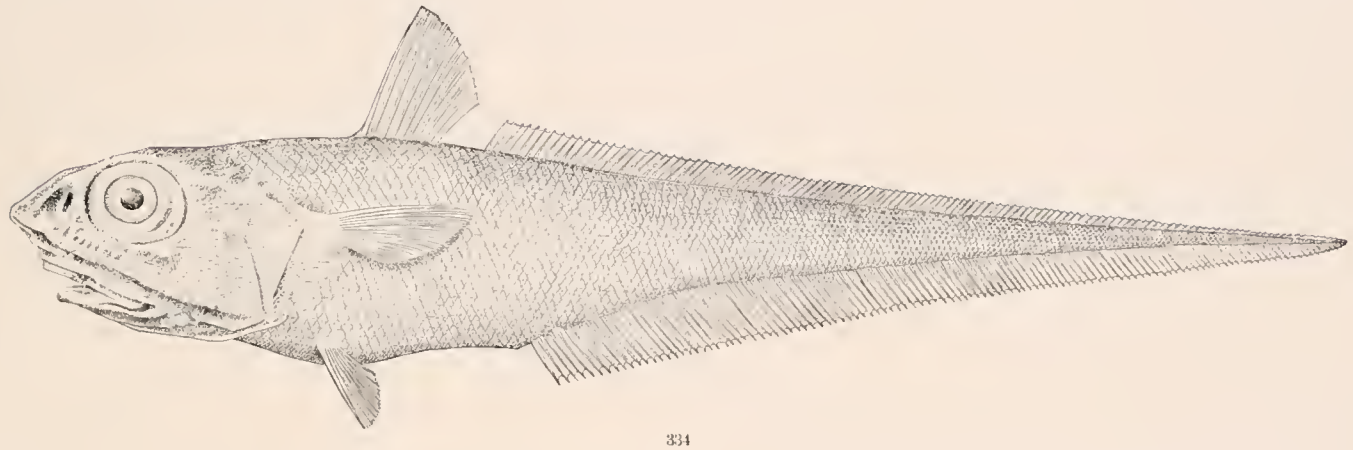


331

332

333

330. Merlucius bilinearis. (p. 386.) 331. Bregmaceros atlanticus. (p. 388.)
332, 333. Coelorhynchus occa. (p. 400.)



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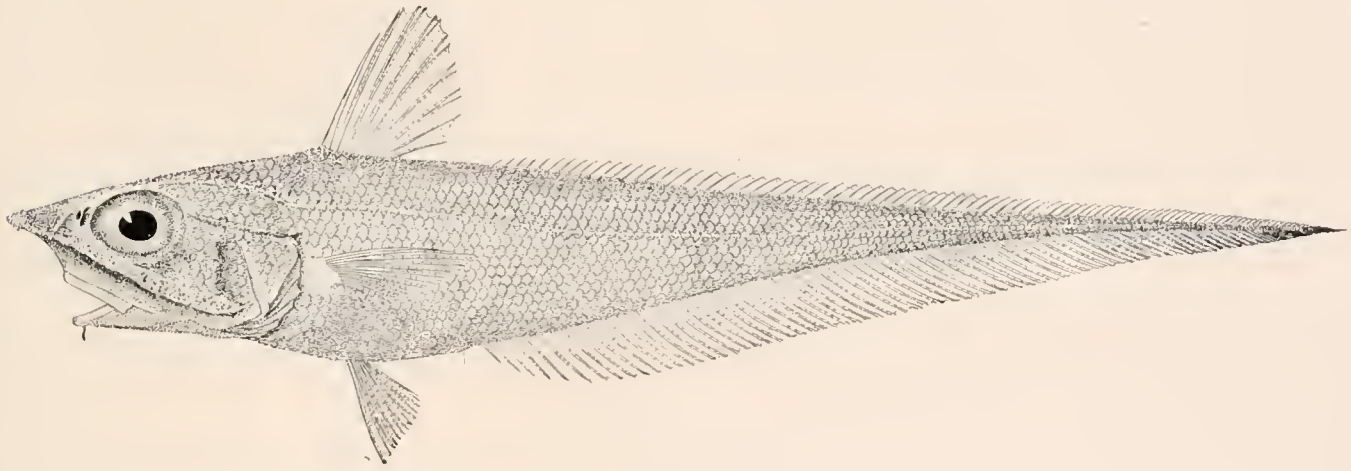

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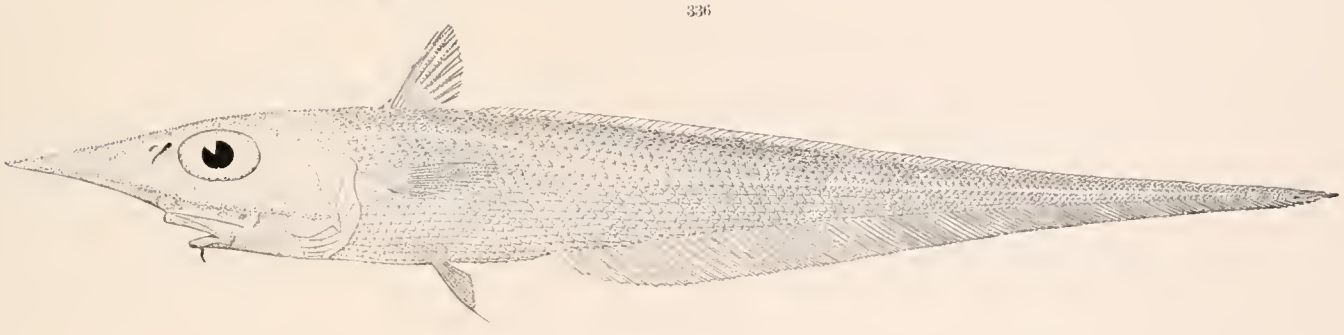
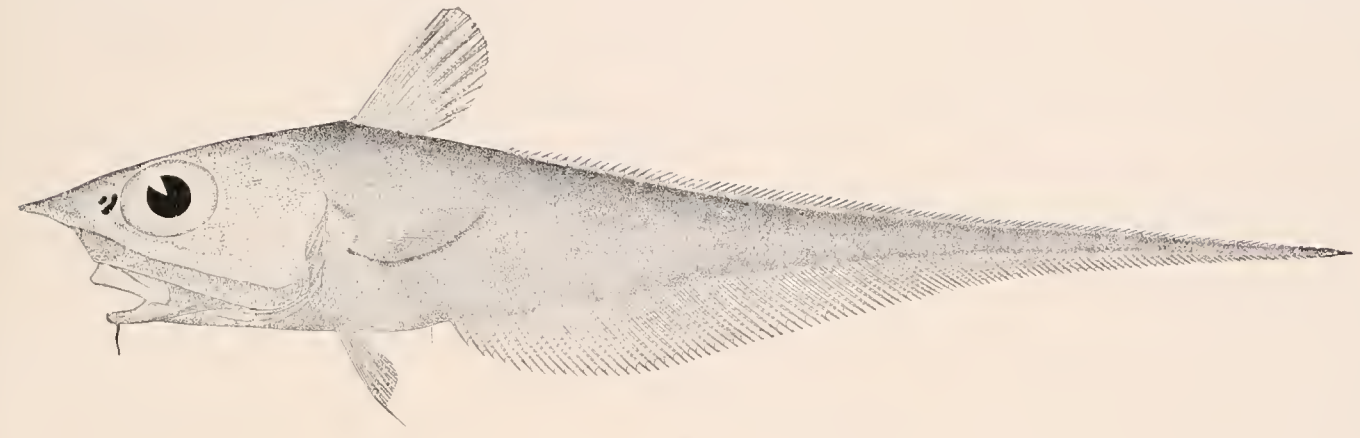


337

334. Macrurus berglax. (p. 391.)
335. Macrurus Bairdii. (p. 393.)
336. Coelorhynchus carminatus. (p. 398.)
337. Coelorhynchus occa. (p. 400.)



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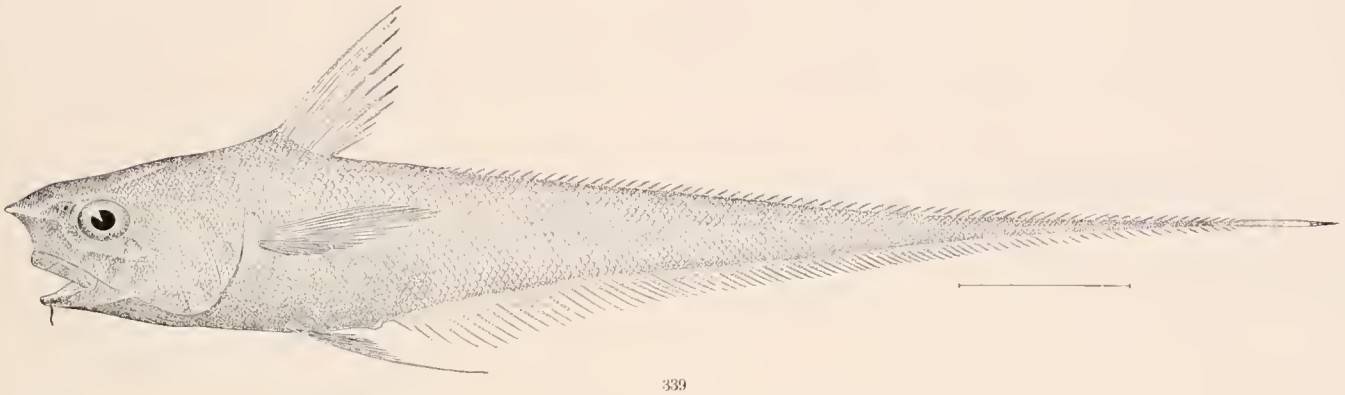

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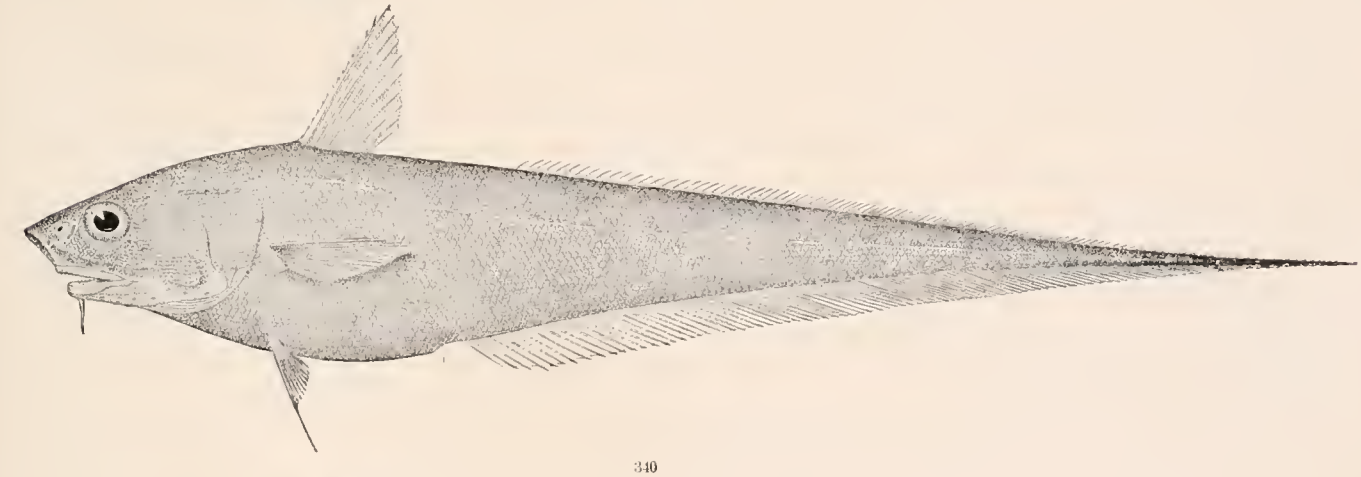

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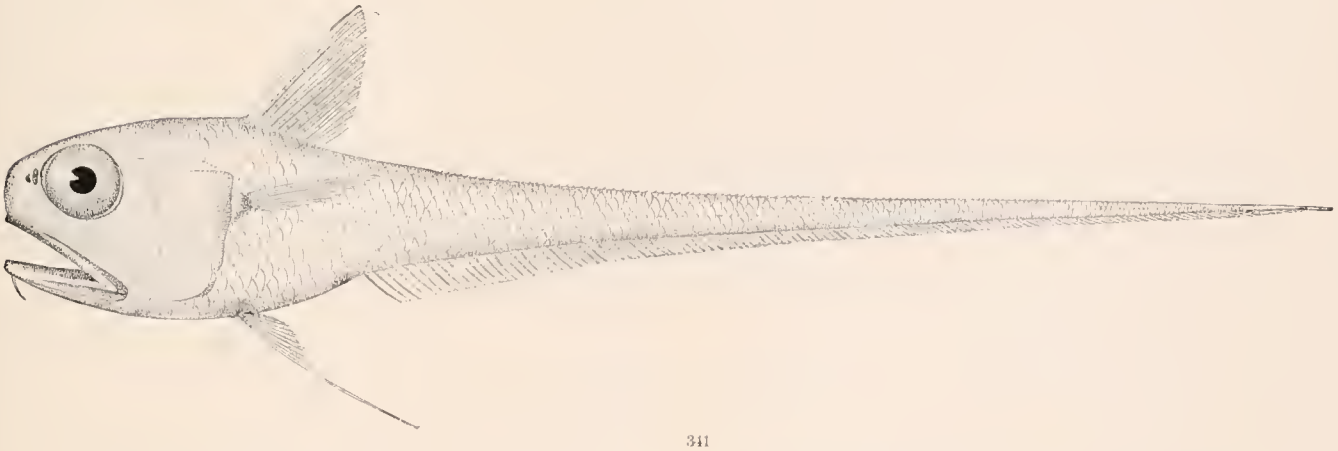
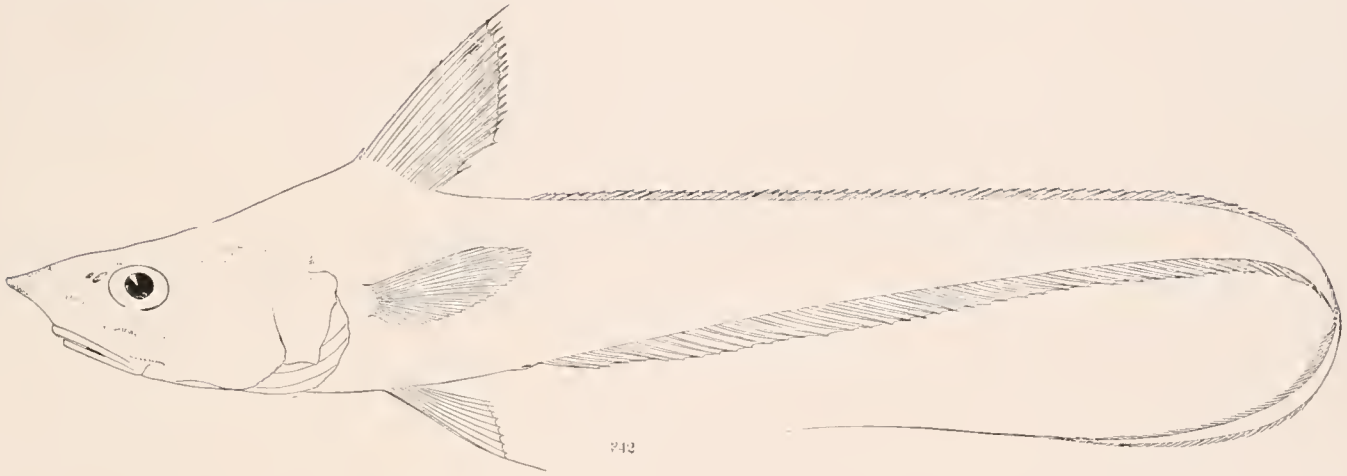


341

338. Cœlorhynchus caribbæus. (p. 401.)
339. Coryphænoides carapinus. (p. 404.)
340. Hymenocephalus Goodei. (p. 407.)
341. Hymenocephalus cavernosus. (p. 408.)



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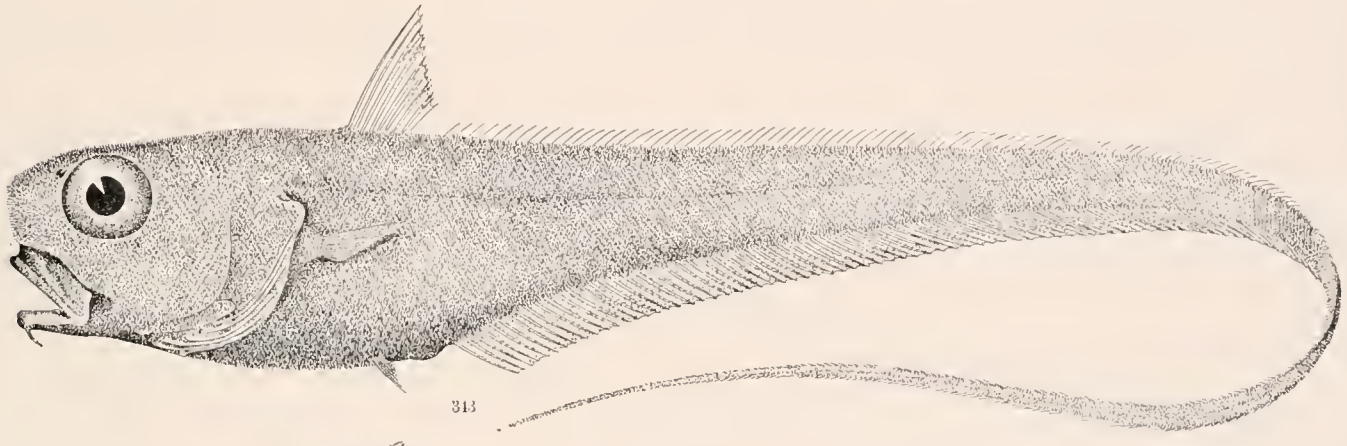

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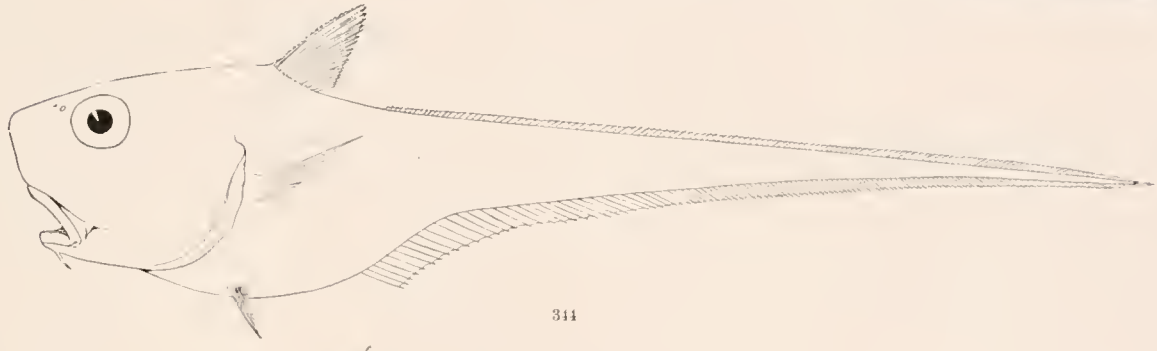

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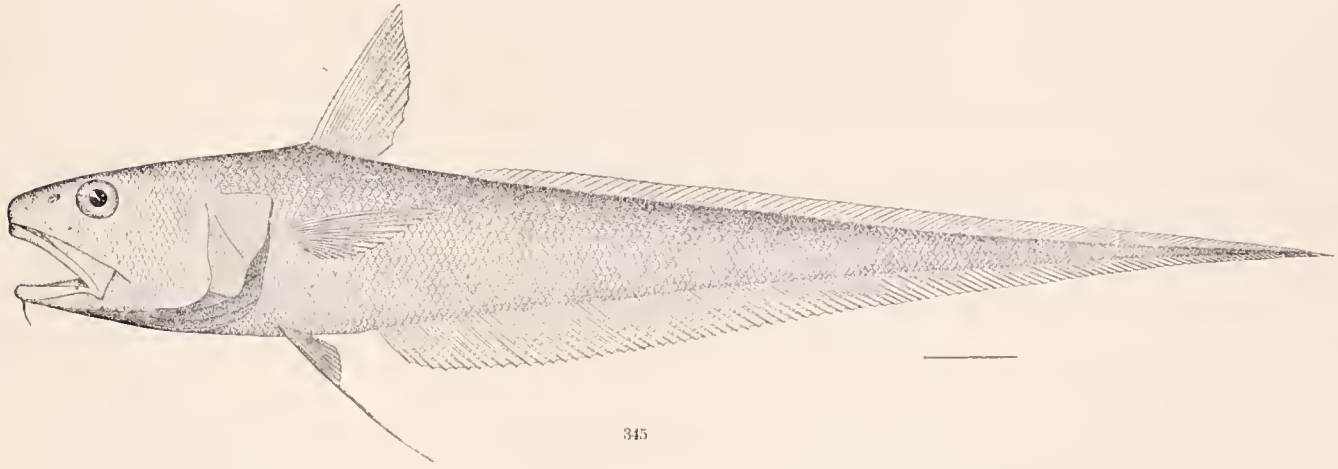
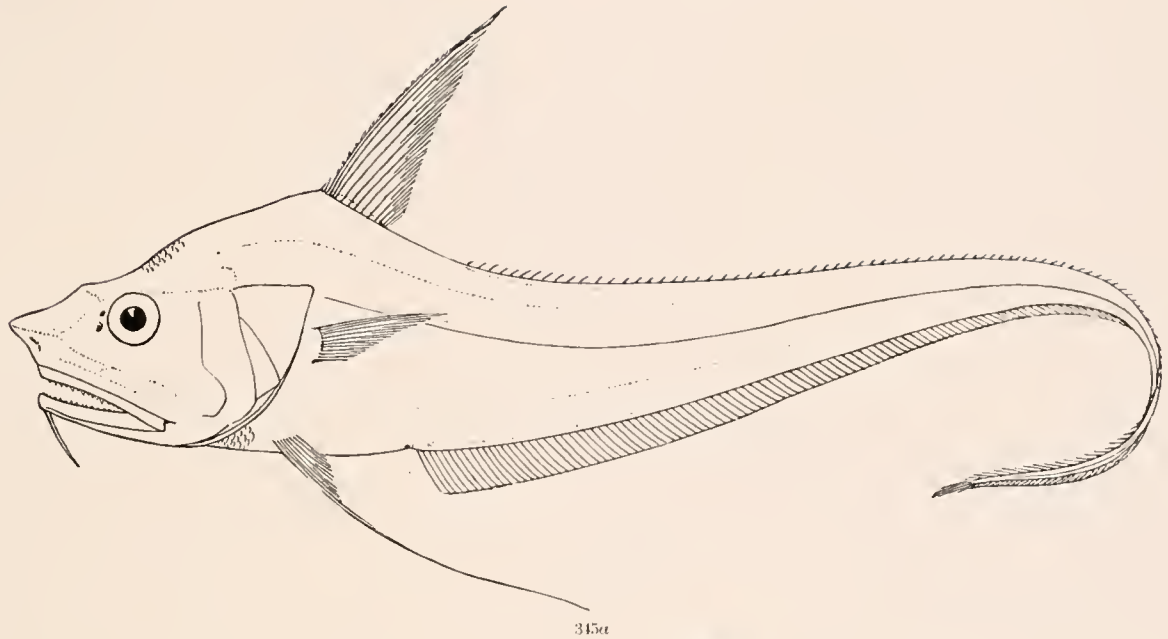


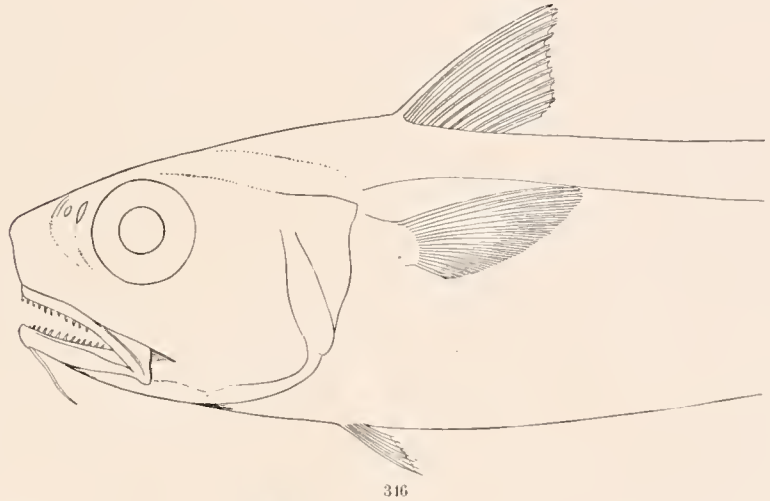
345

342. Lionurus filicauda. (p. 409.)
344. Cetonurus globiceps. (p. 411.)

343. Trachonurus sulcatus. (p. 410.)
345. Chalinura simula. (p. 412.)



345*a*



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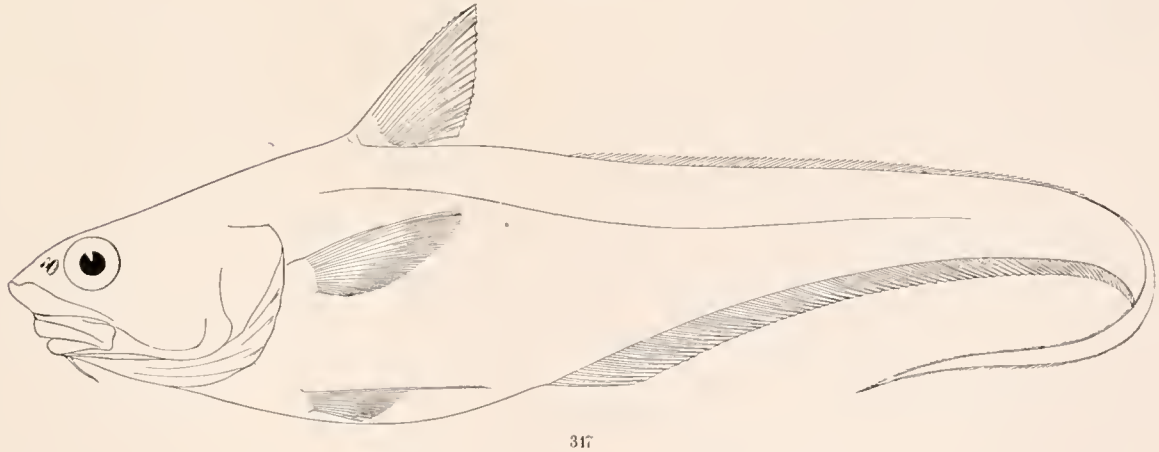
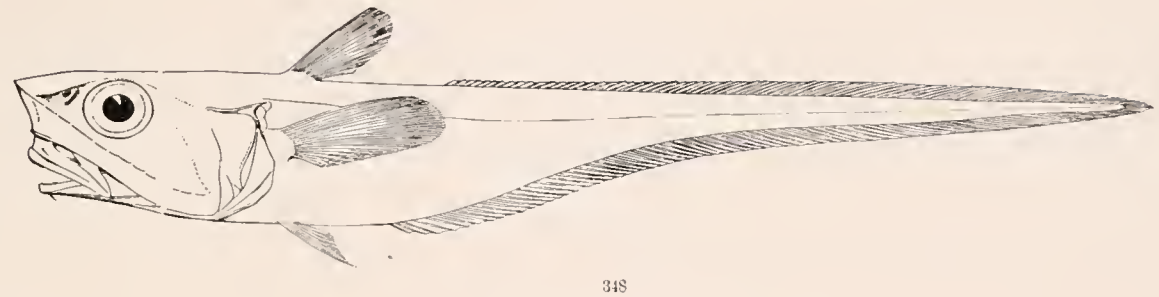


347

345*a*. Chalinura mediterranea. (p. 525.)
346. Nematonurus gigas. (p. 416.)
347. Moseleya longifilis. (p. 417.)



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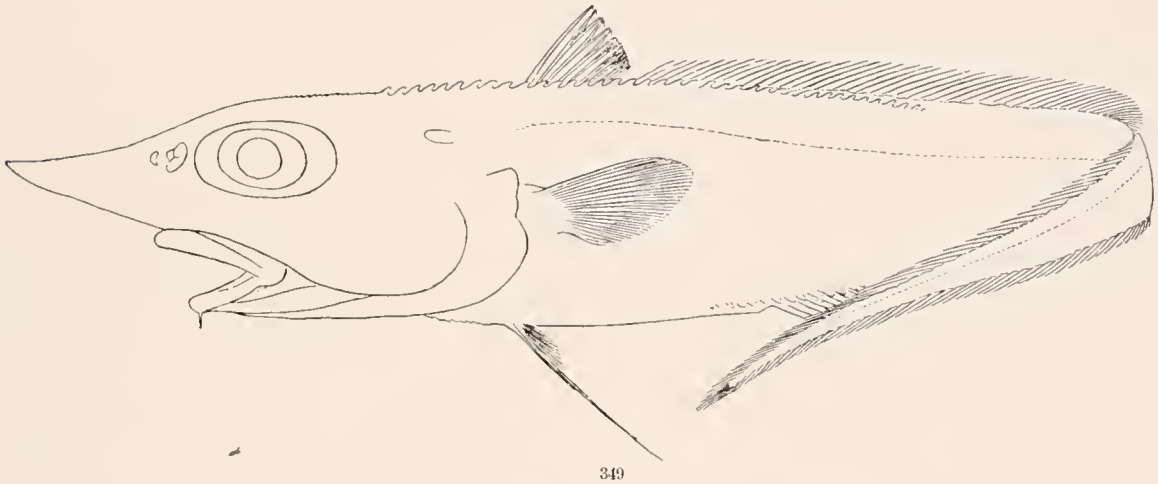
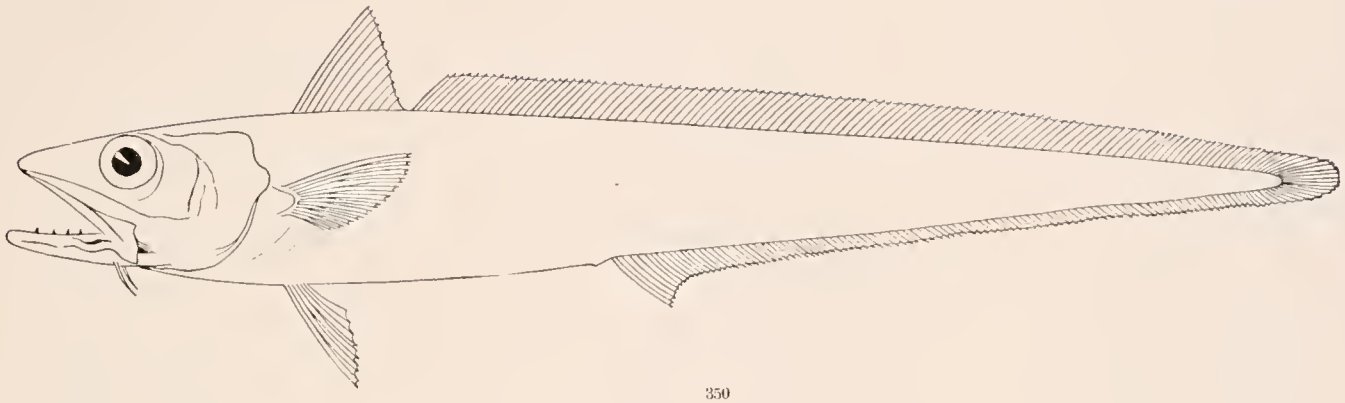


349

349*a*

348. Abyssicola macrochira. (p. 417.) 349. Trachyrhynchus scabrus. (p. 417.)
349*a*. Macrurus longifilis. (p. 417.)



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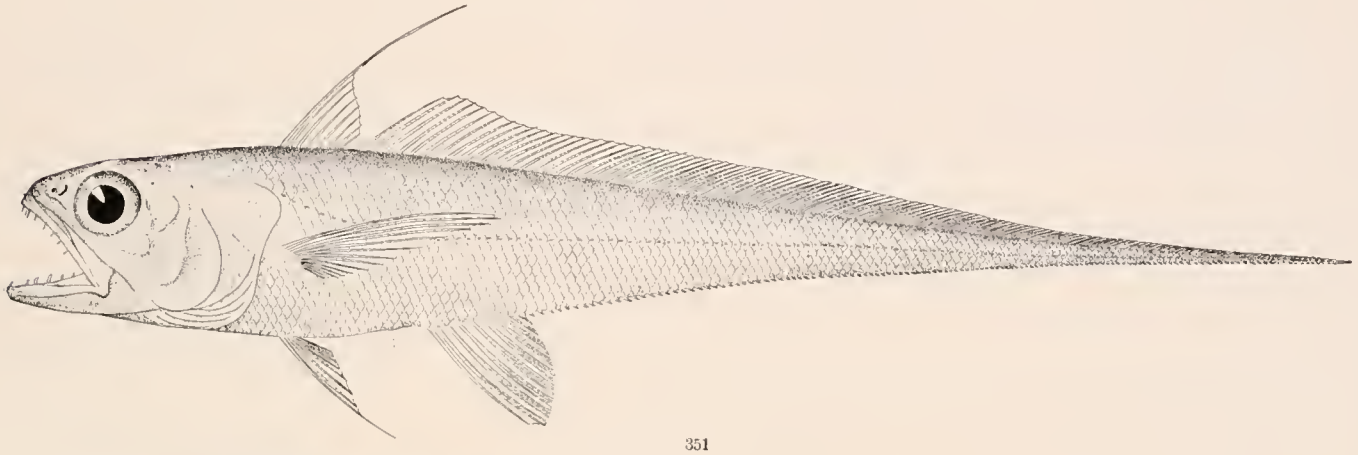

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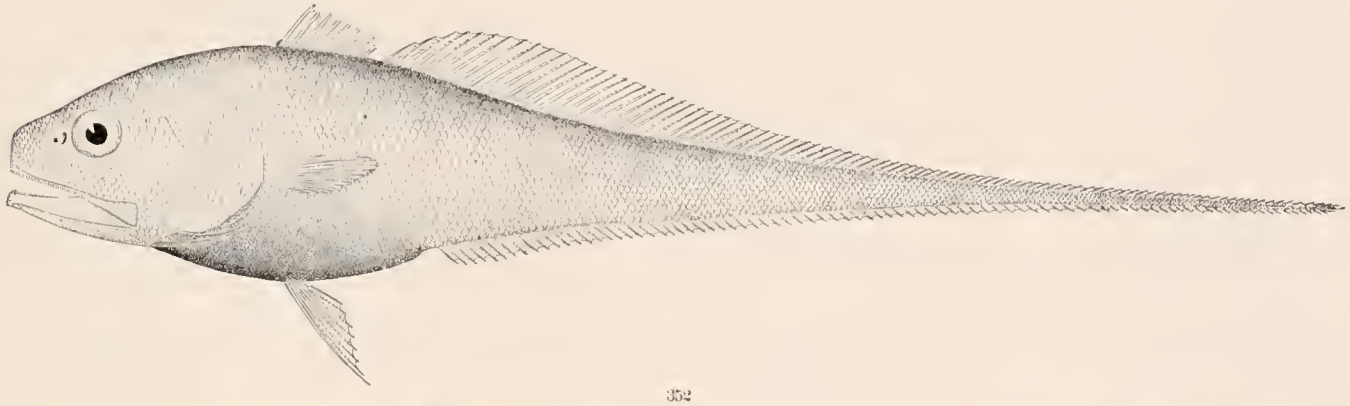

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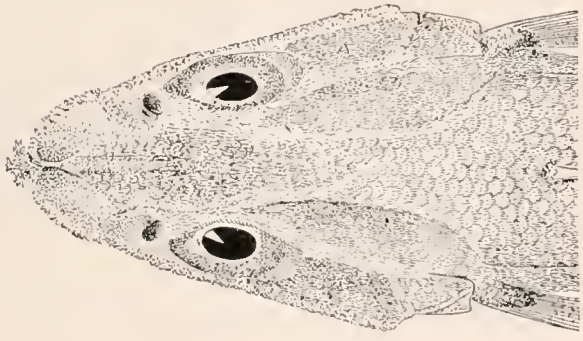
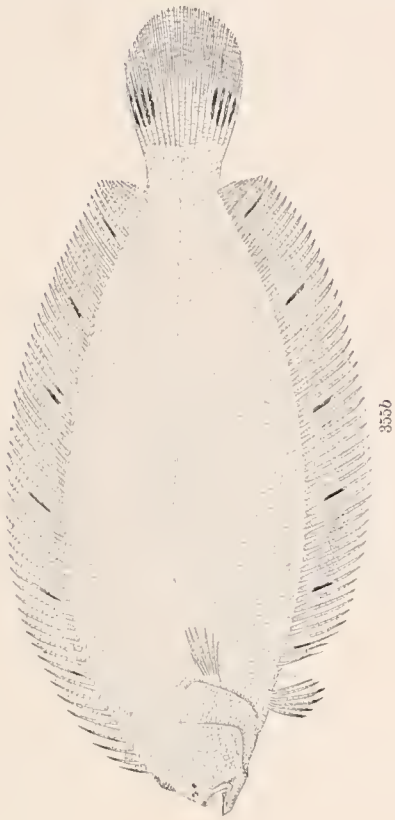


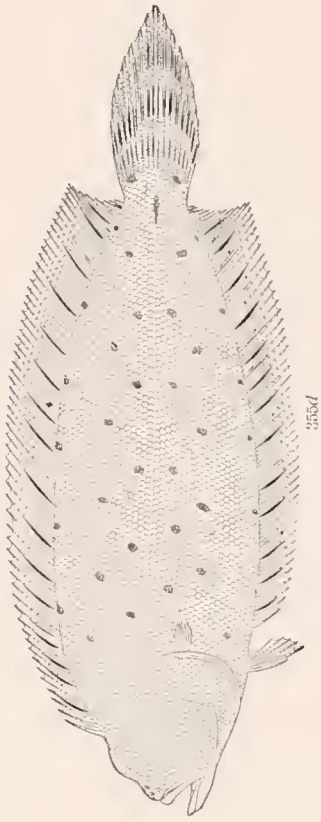
353

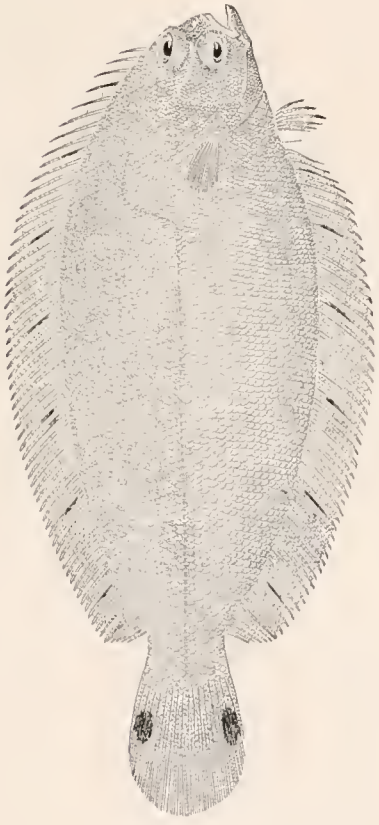
354

350. Macruronus novæ-zelandiæ. (p. 418.)
352. Bathygadus favosus. (p. 420.)

351. Steindachneria argentea. (p. 419.)
353, 354. Celorhynchus carminatus. (p. 398.)

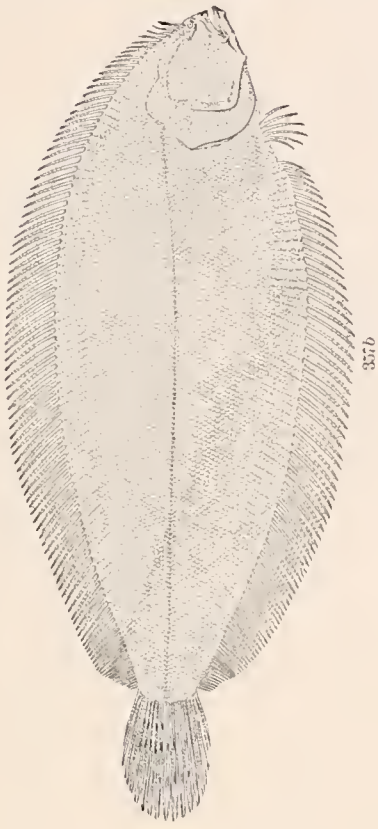


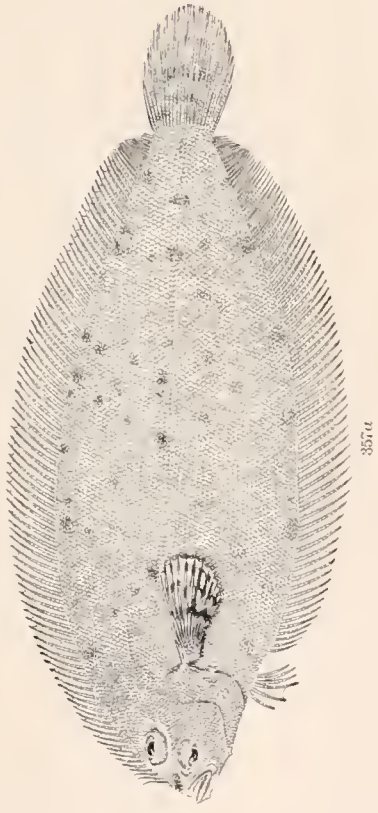


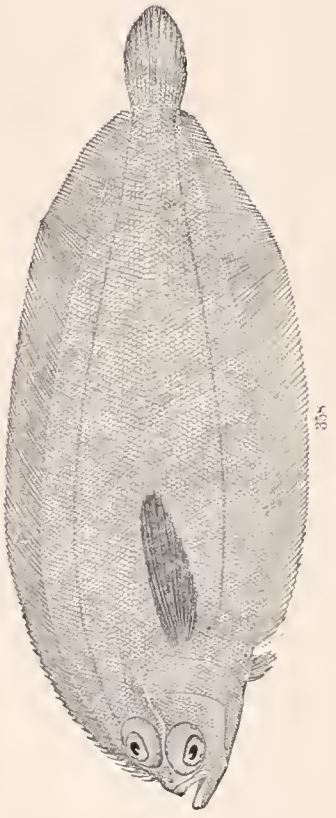


355*a–d*. Limanda Beanii. (p. 428.)

356*a*, *b*. Glyptocephalus cynoglossus. (p. 430.)

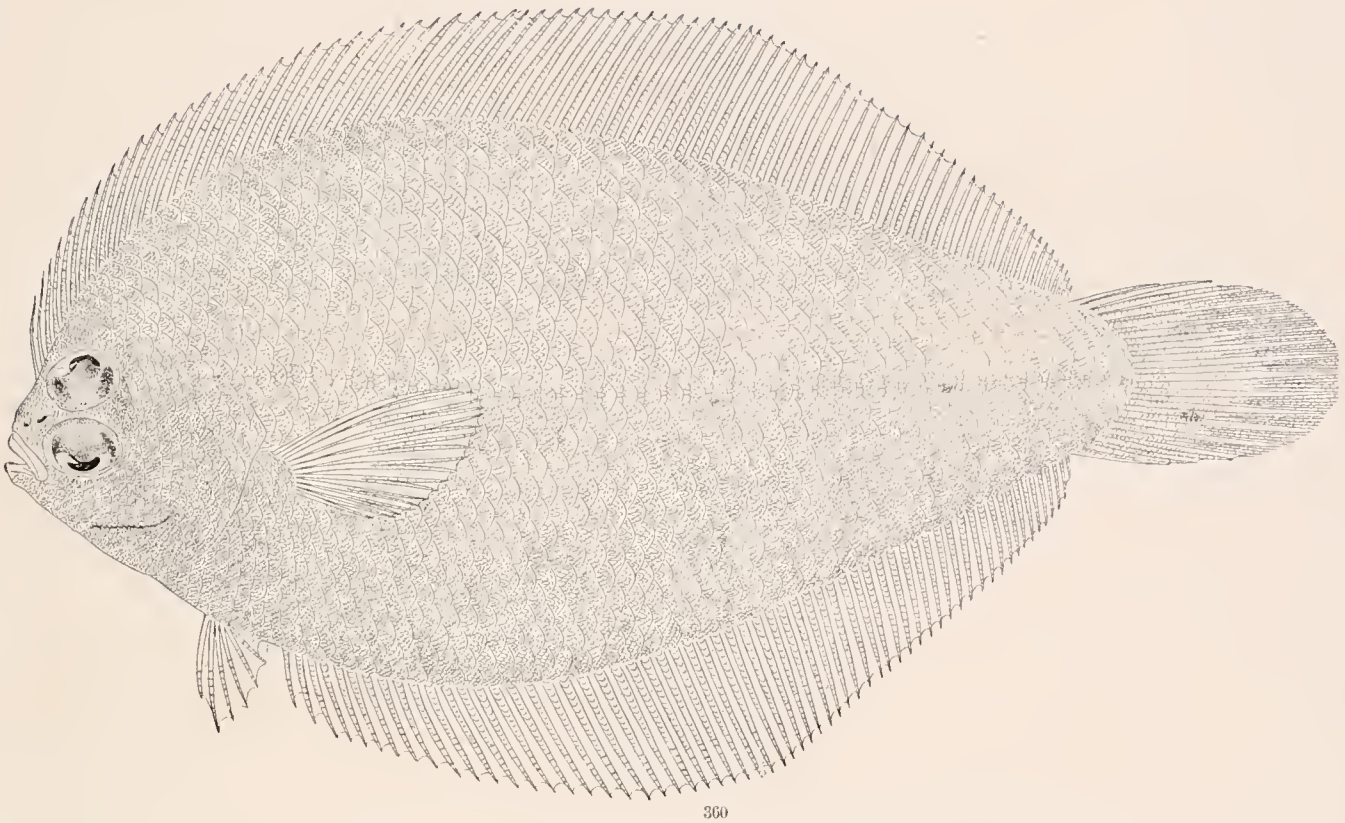






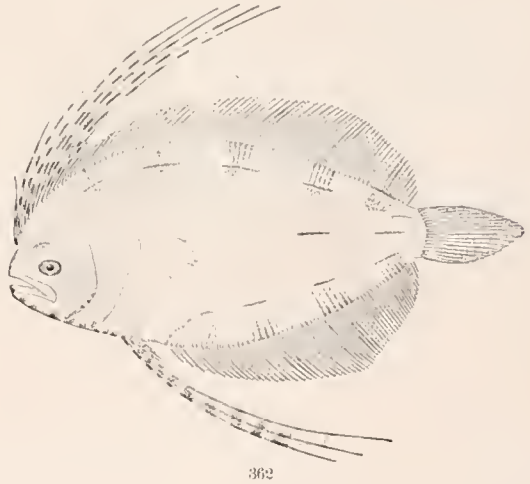
357*a*, *b*. MONOLENE SESSILICAUDA. (p. 452.)

358, 359. MONOLENE ATRIMANA. (p. 455.)



360

361

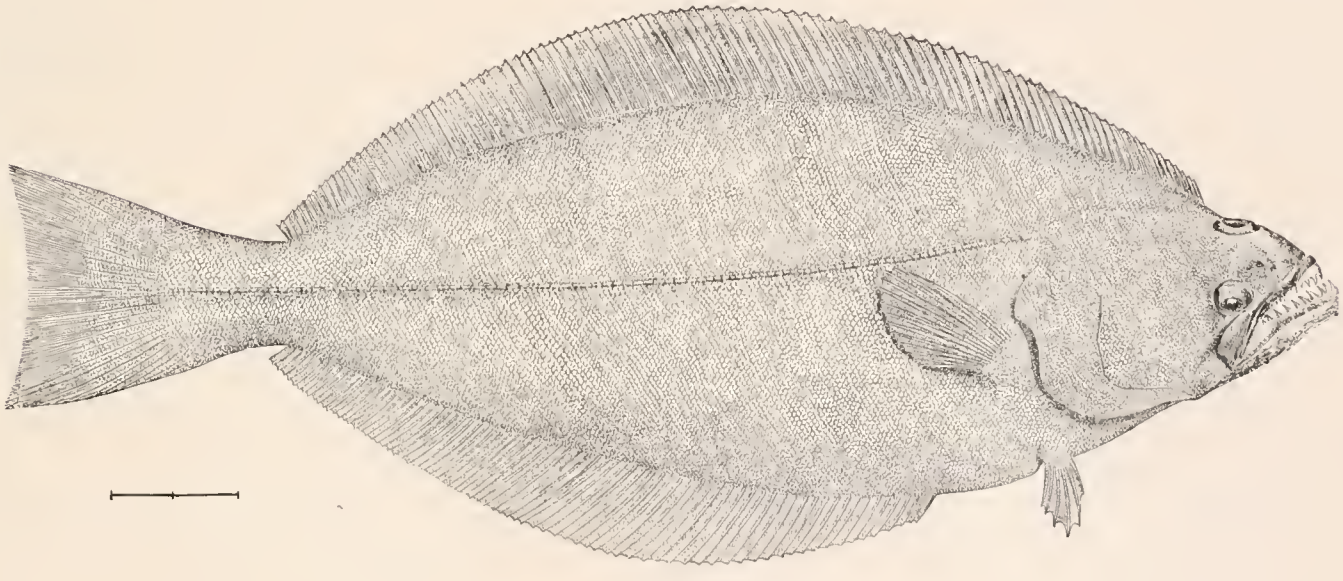


362

360, 361. ETROPUS RIMOSUS. (p. 450.)

362. NOTOSEMA DILECTA. (p. 437.)

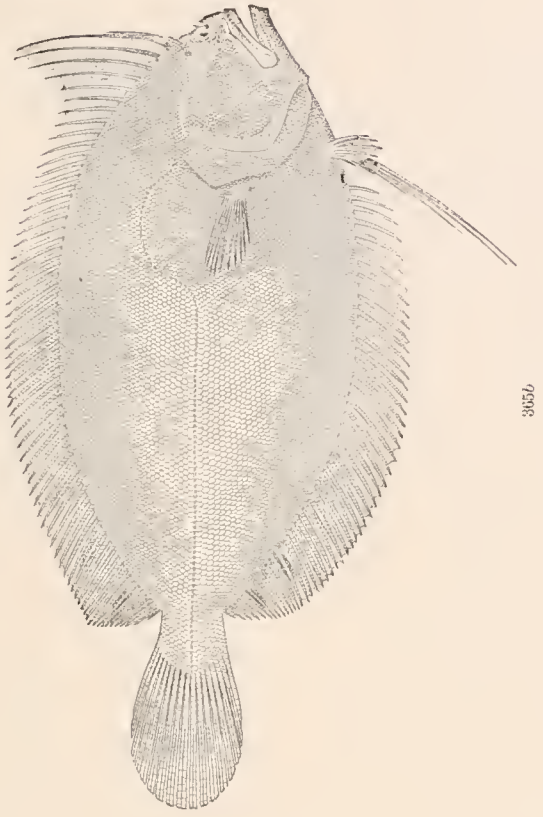
363

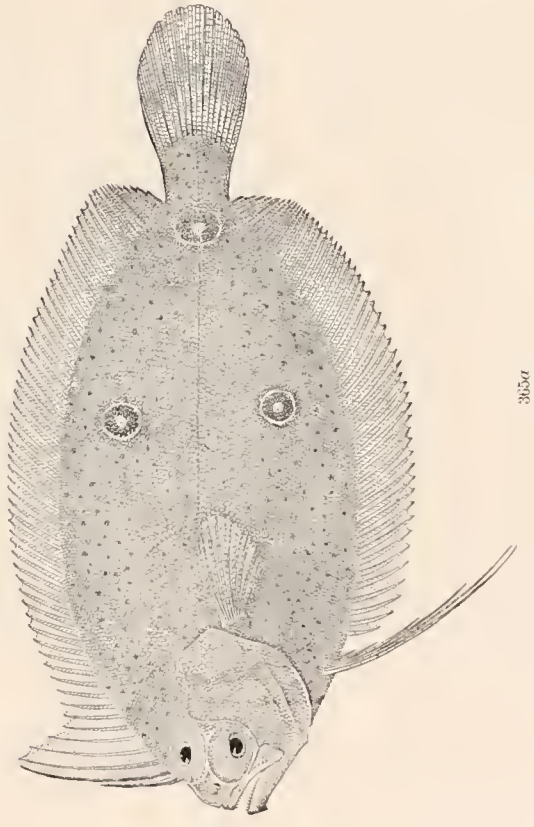


364

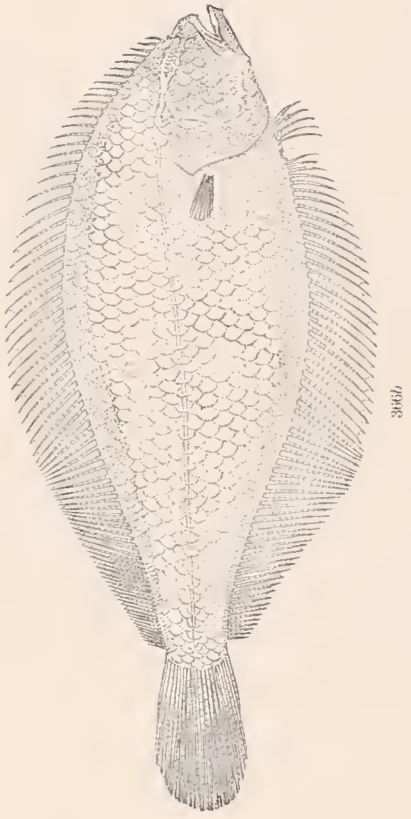
363. Hippoglossus vulgaris. (p. 434.)

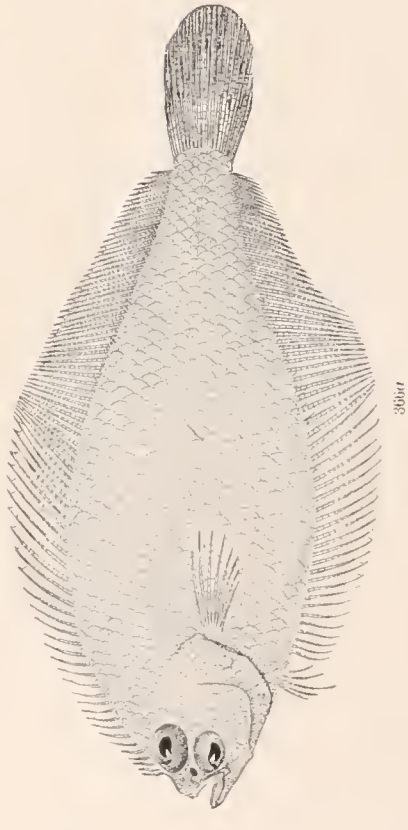
364. Platysomatichthys hippoglossoides. (p. 435.)



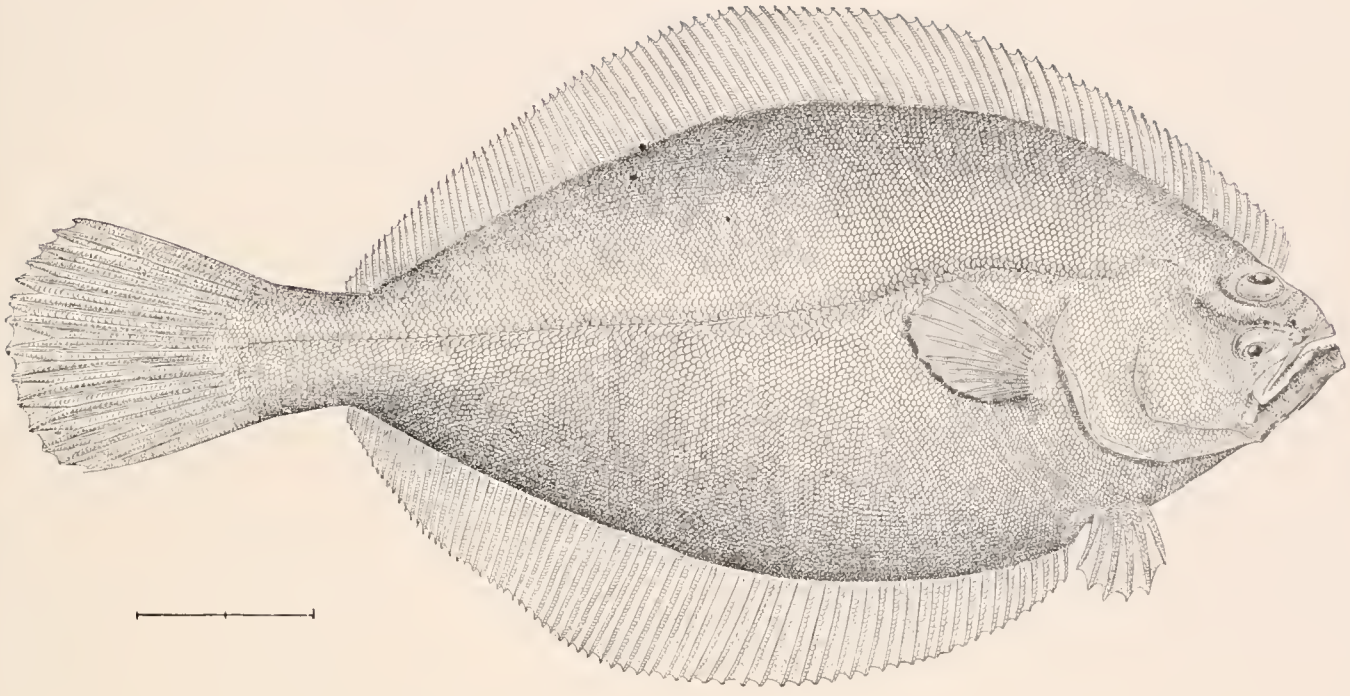


365*a*, *b*. NOTOSEMA DILECTA. (p. 437.)





366*a*, *b*. CITHARICHTHYS ARCTIFRONS. (p. 442.)



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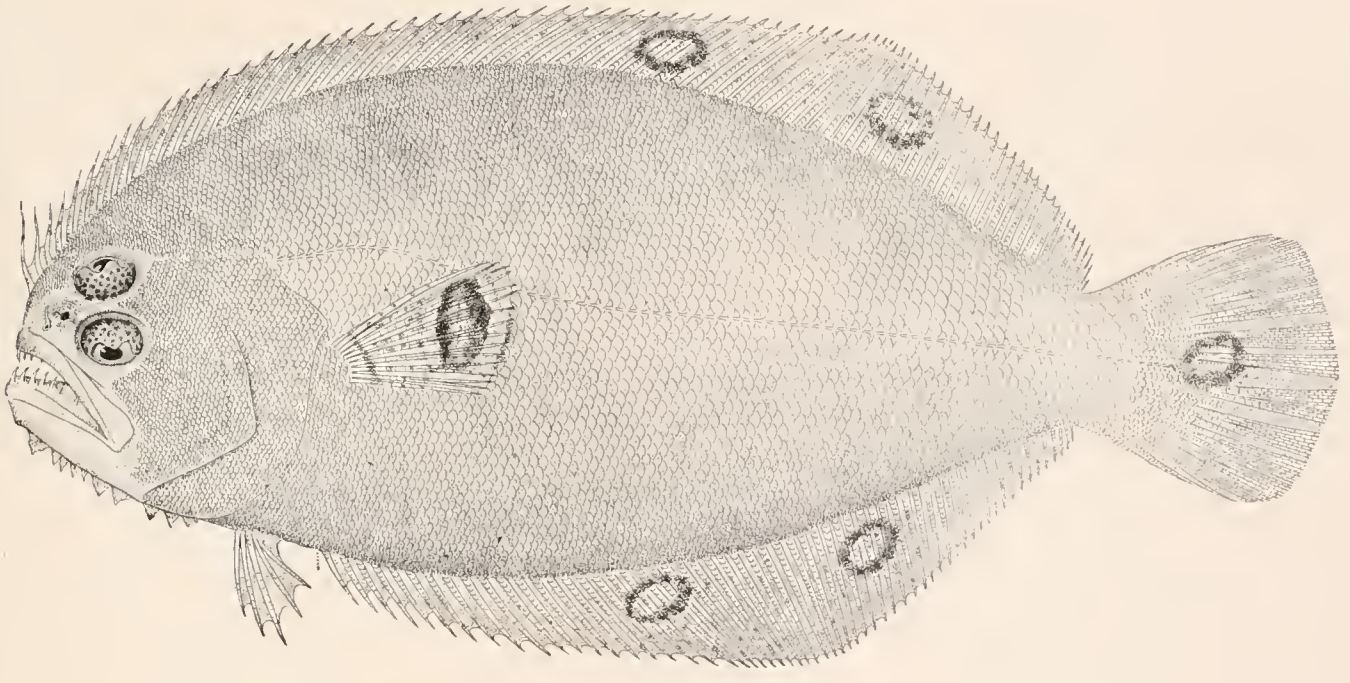
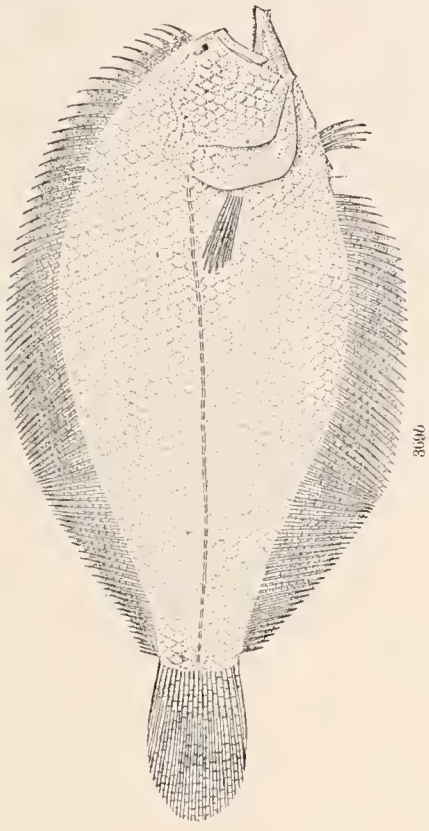
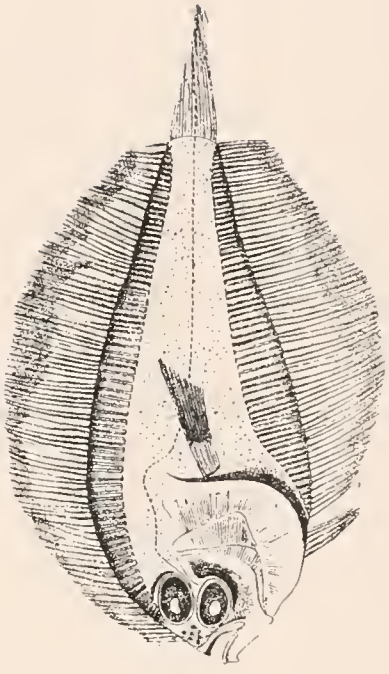


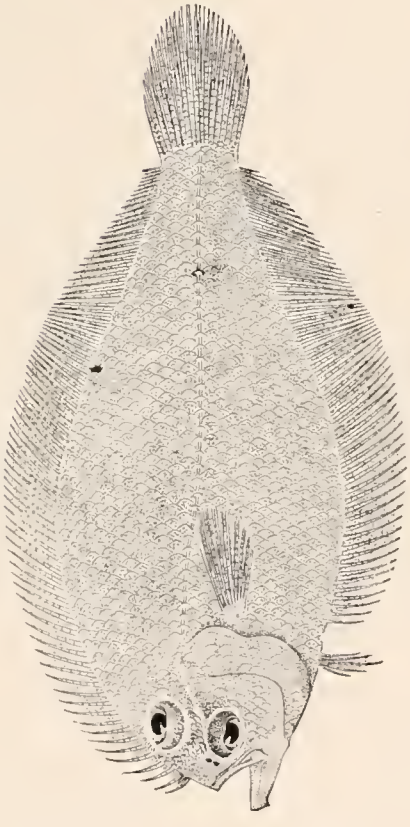
368

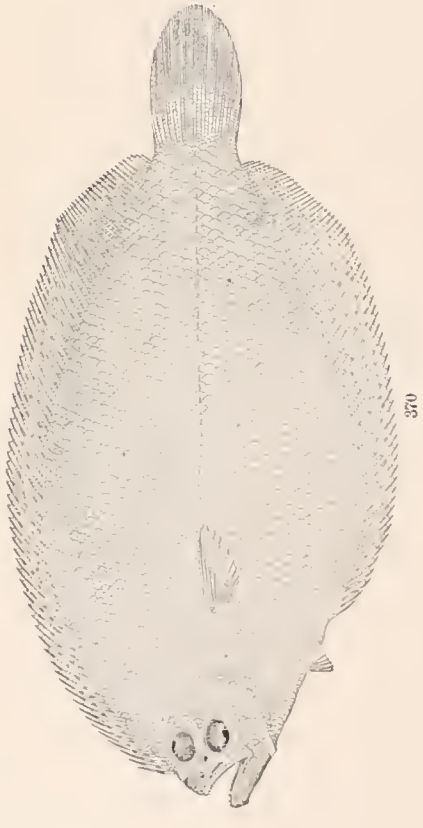
367. Hippoglossoides platessoides. (p. 438.)

368. Cyclopsetta fimbriata. (p. 451.)

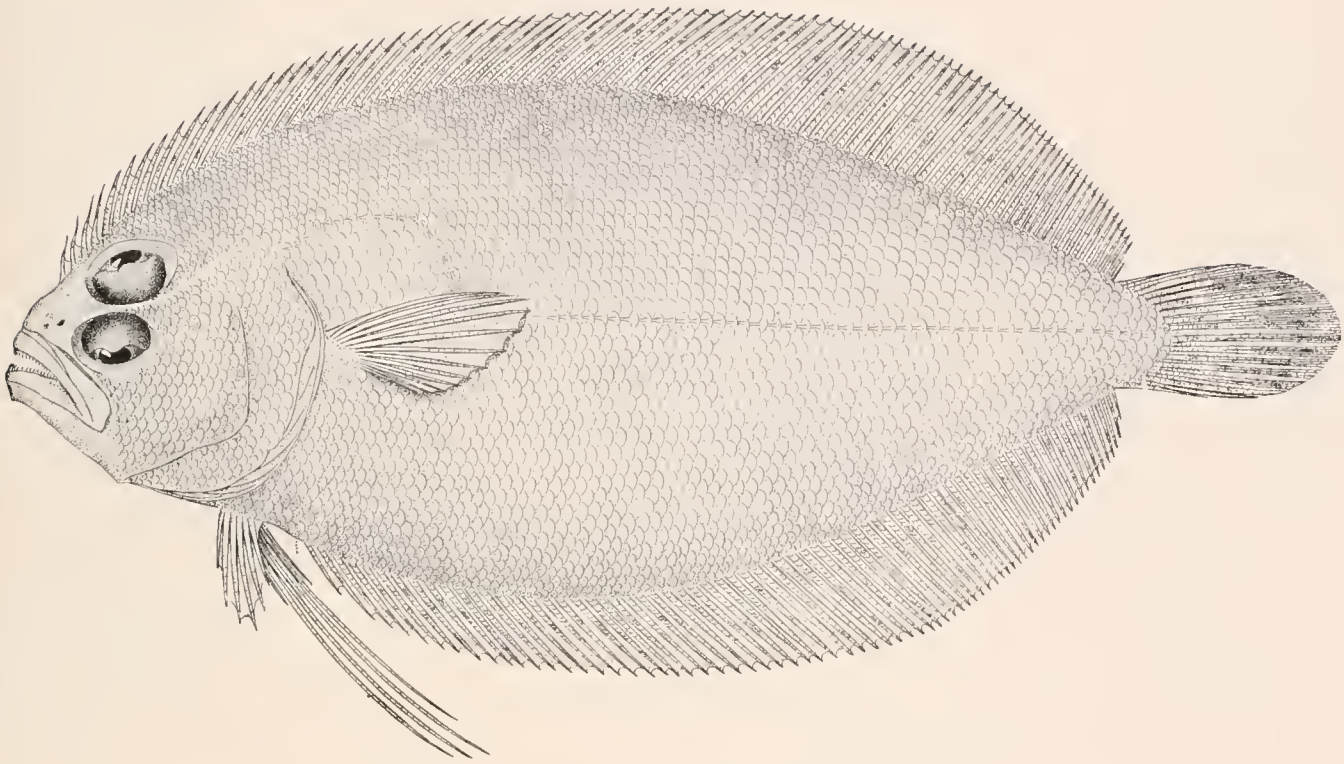








369*a*, *b*. CITHARICHTHYS UNICORNUS. (p. 444.)
370. CITHARICHTHYS SPILOPTERUS. (p. 447.)
371. SCIANECTES MACROPHTHALMUS. (p. 440.)



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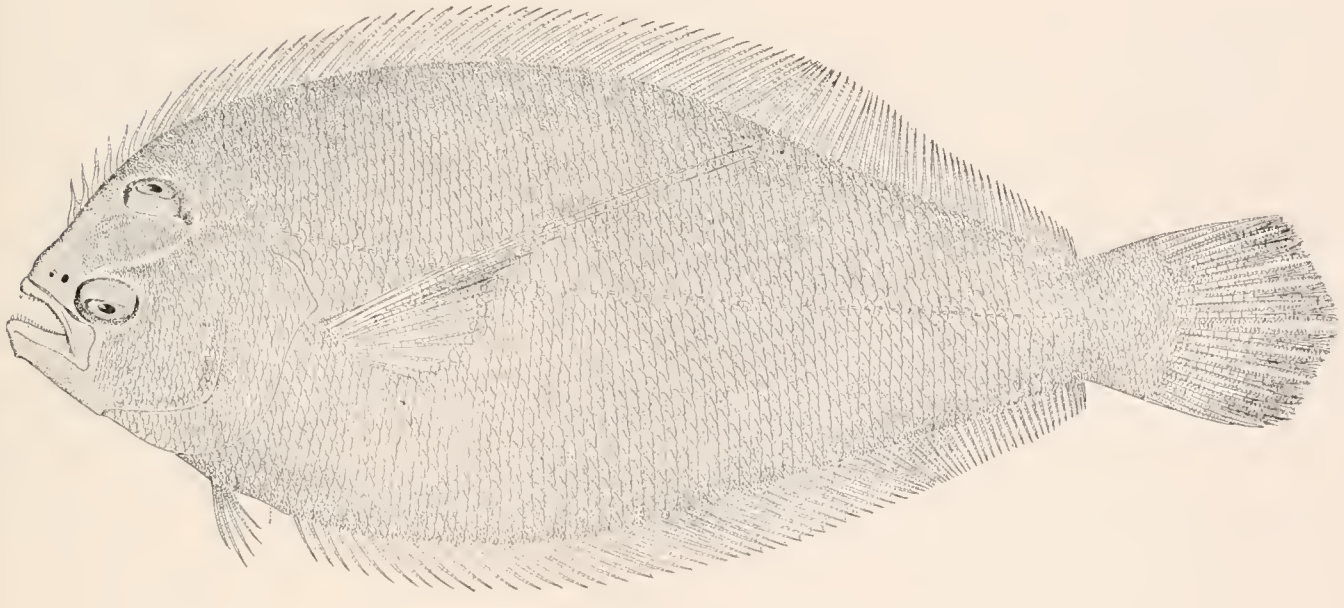
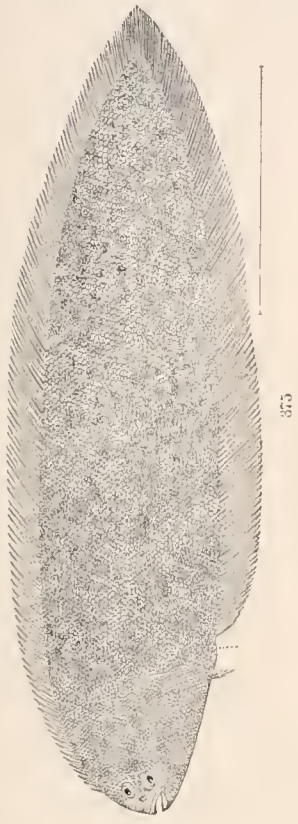


373

372. Trichopsetta ventralis. (p. 440.)

373. Citharichthys pætulus. (p. 448.)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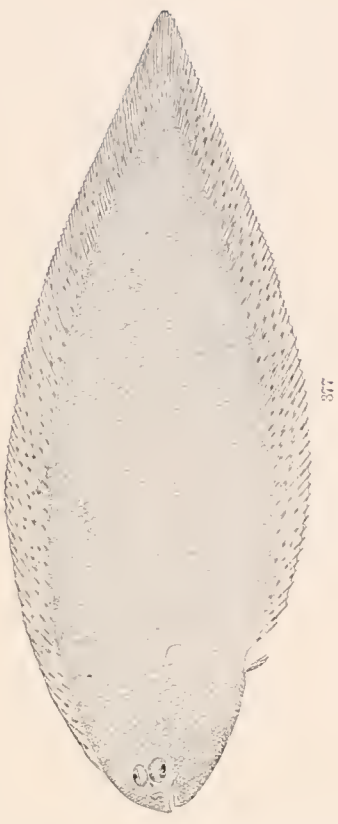
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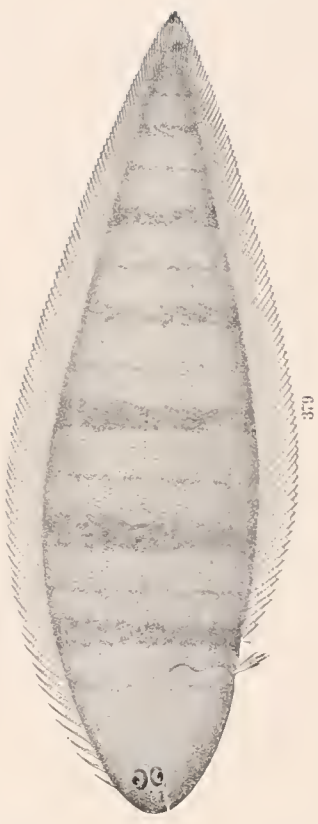
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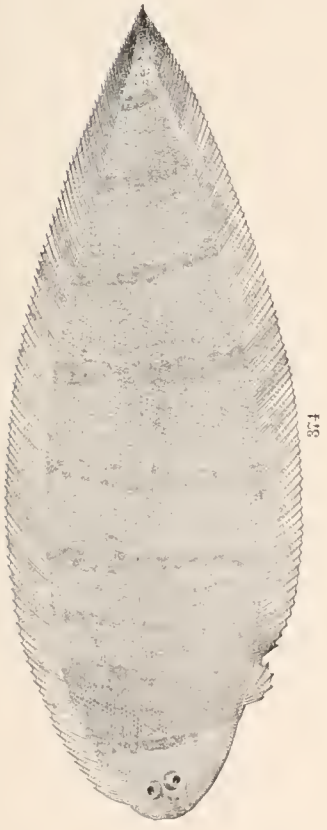
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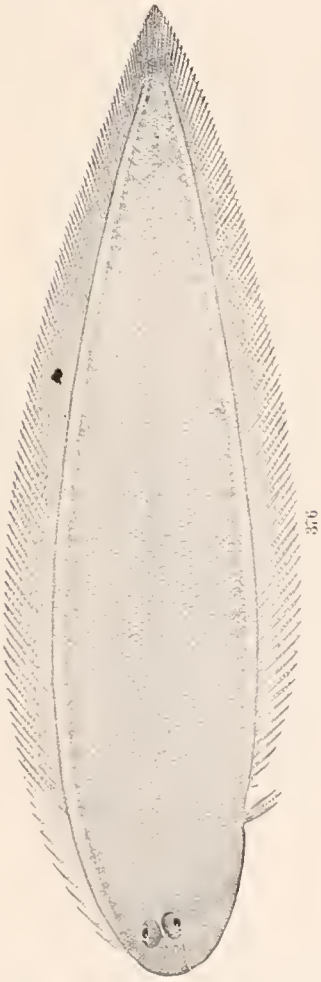
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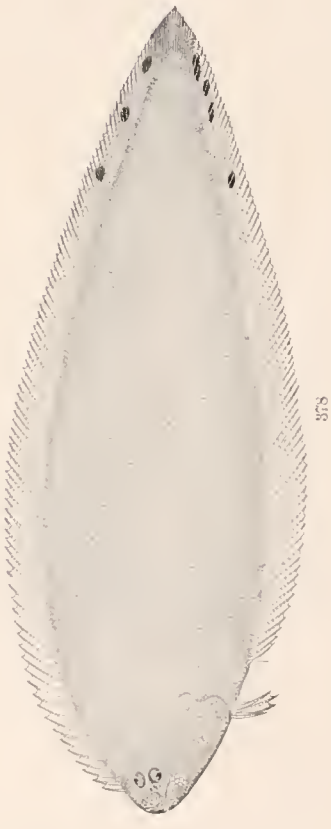
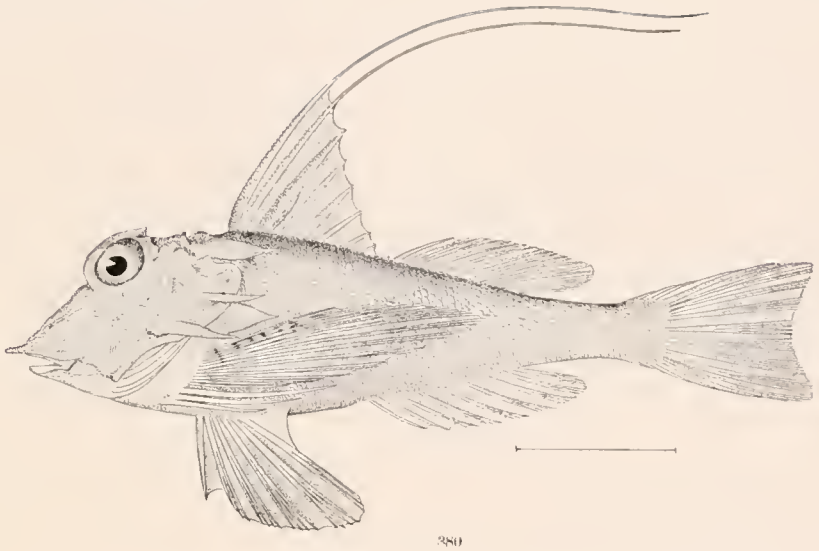

378

374. APHORISTIA FASCIATA. (p. 458.)
375. APHORISTIA NEBULOSA. (p. 458.)
376. APHORISTIA MARGINATA. (p. 459.)
377. APHORISTIA PIGRA. (p. 460.)
378. APHORISTIA DIOMEDIANA. (p. 460.)
379. APHORISTIA PUSILLA. (p. 461.)



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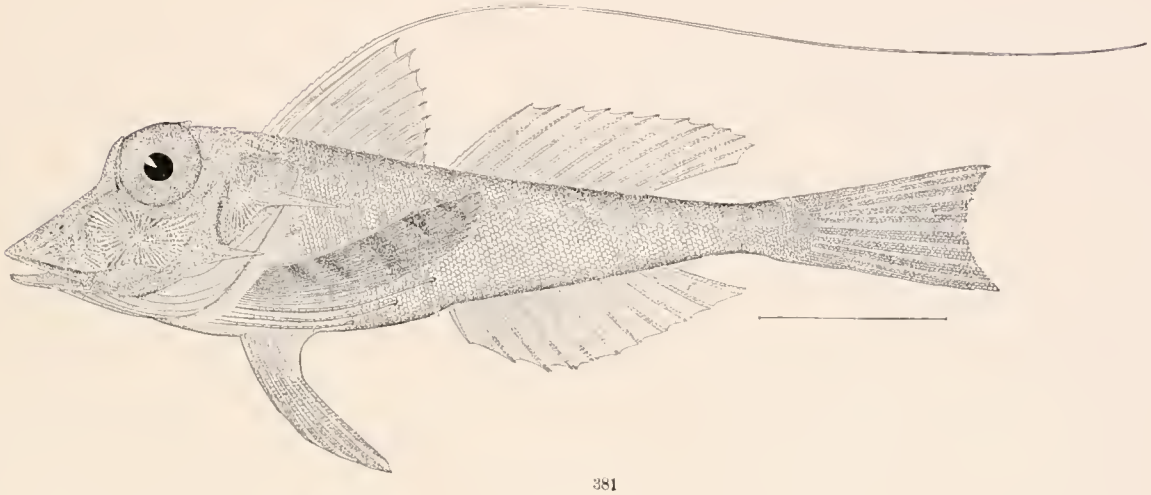

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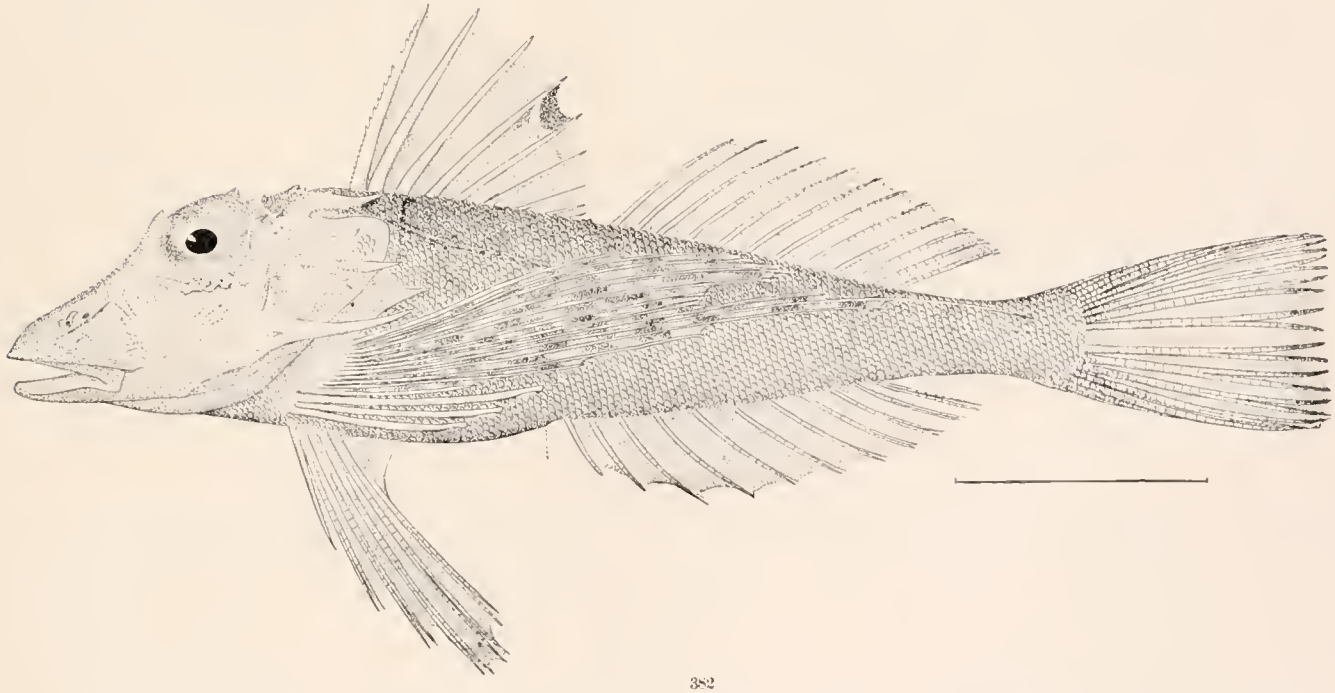
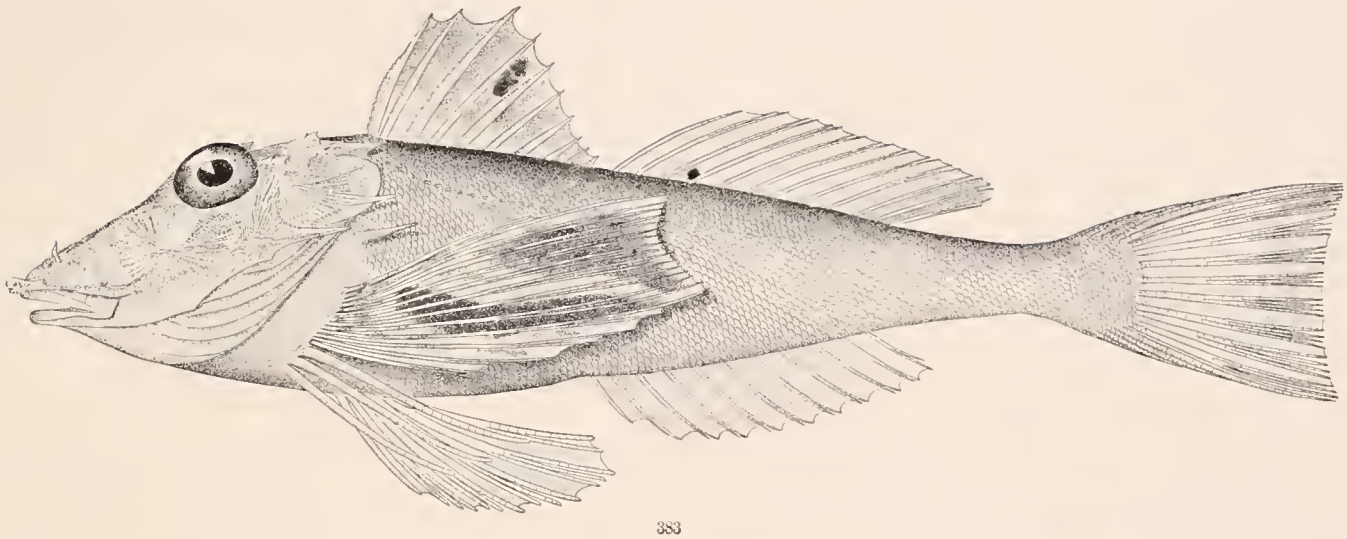


382

380. PRIONOTUS MILITARIS. (p. 464.) 381. PRIONOTUS EGRETTA. (p. 465.) 382. PRIONOTUS ALATUS. (p. 467.)



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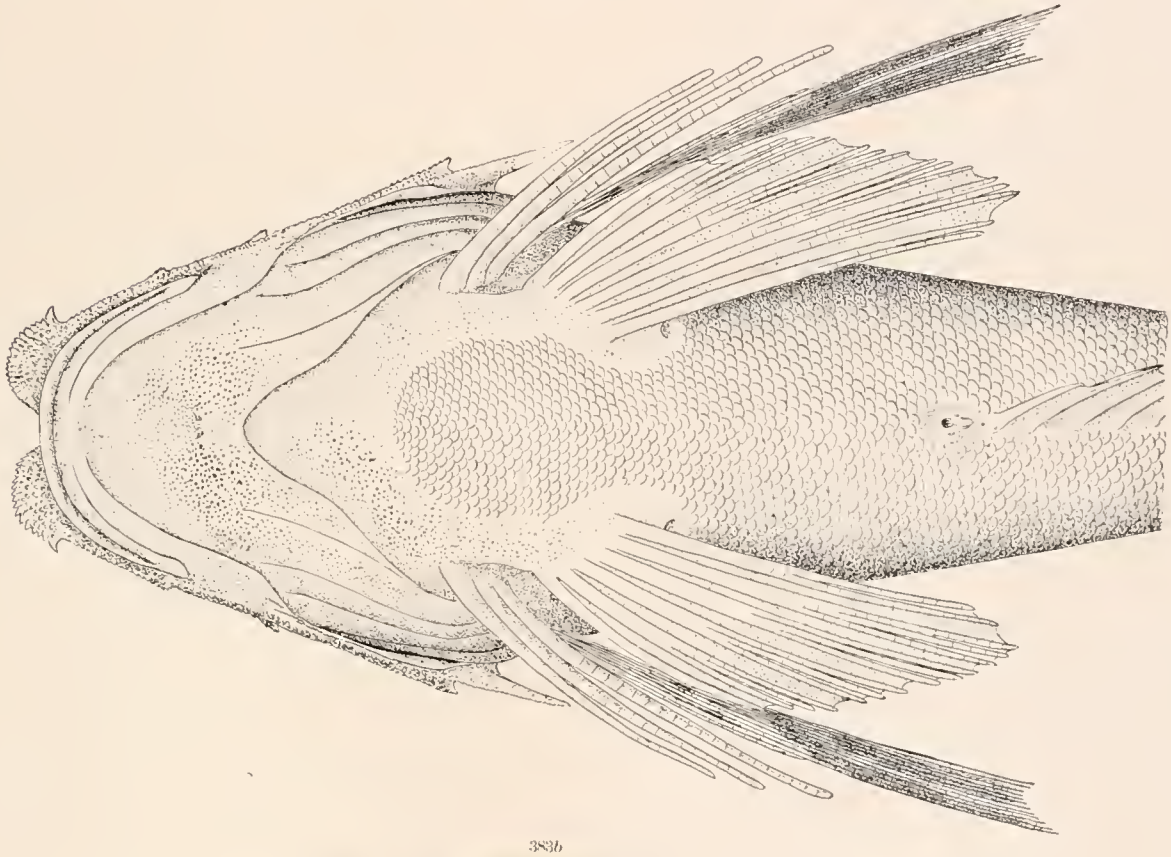
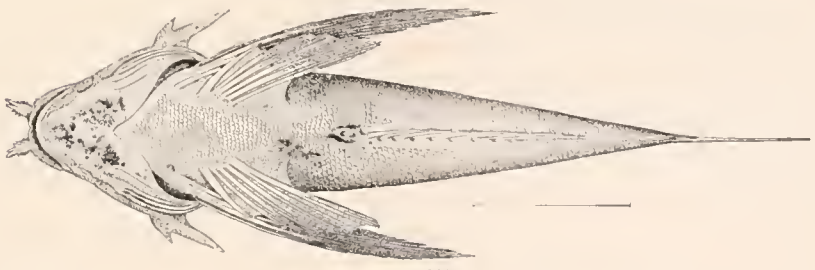


383*b*

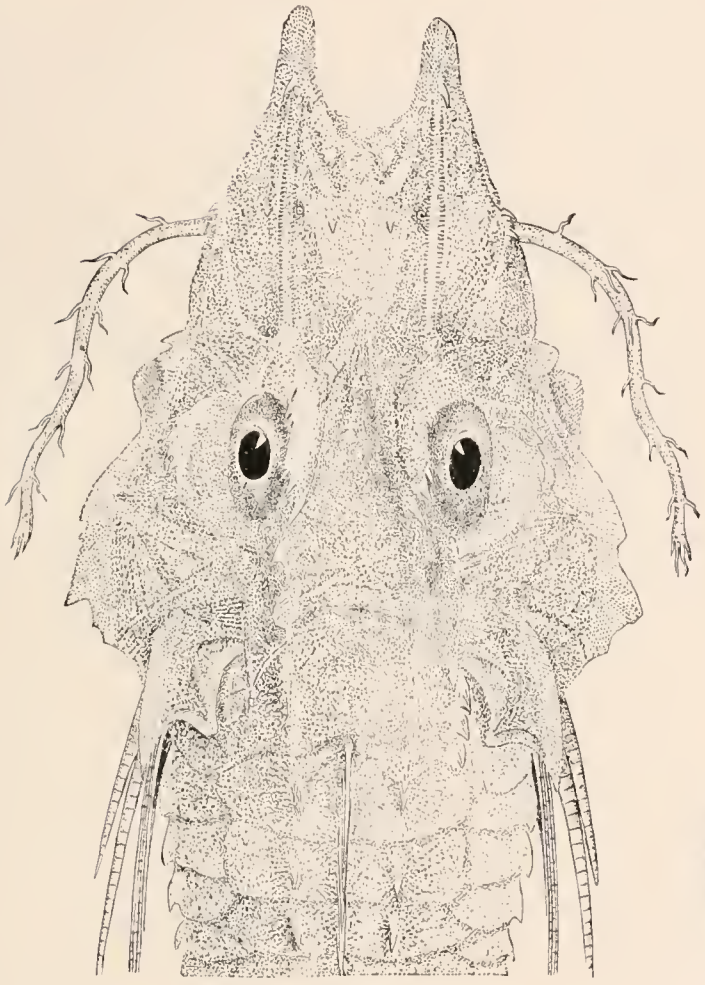


384

383, 383*b*. PRIONOTUS TRINITATIS. (p. 468.)

384. PRIONOTUS MILITARIS. (p. 464.)

385



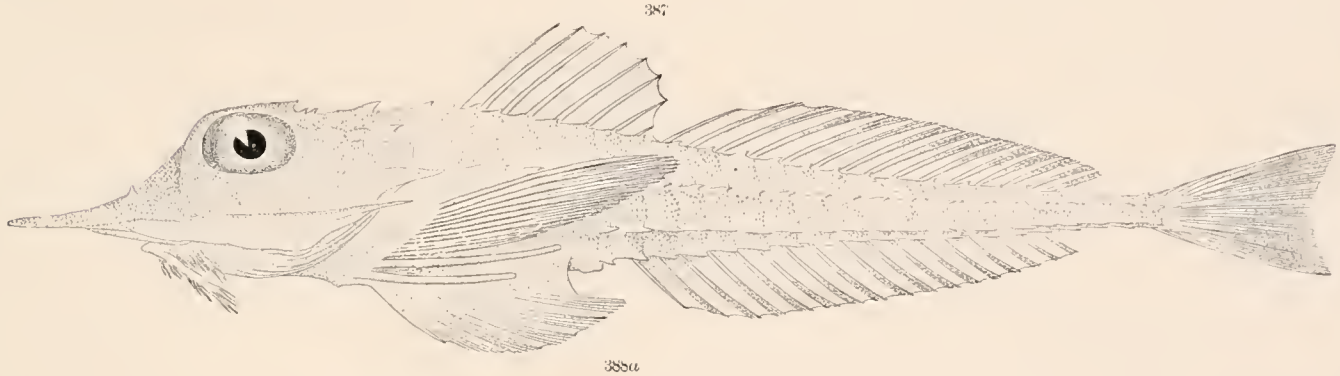
385*a*

385*b*

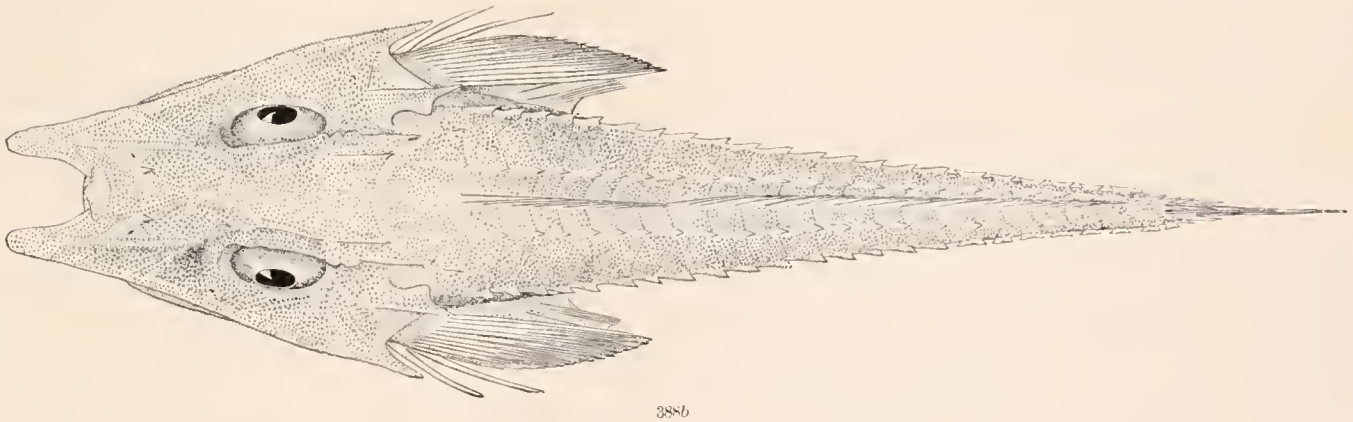
385, 385*a*, *b*. PERISTEDION MINIATUM. (p. 470.)

386

387



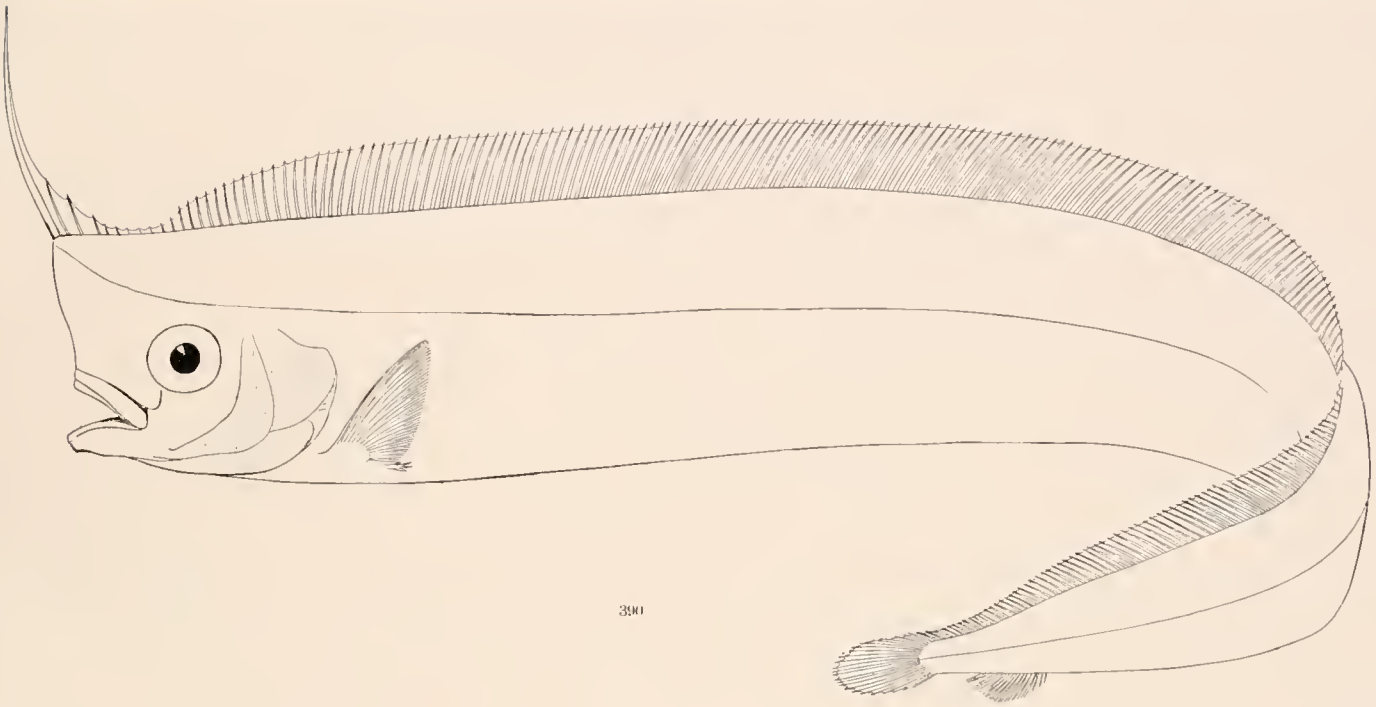
388*a*



388*b*

386. Peristedion longispatha. (p. 472.) 387. Peristedion gracile. (p. 173.)
388*a*, *b*. Peristedion platycephalum. (p. 474.)

389



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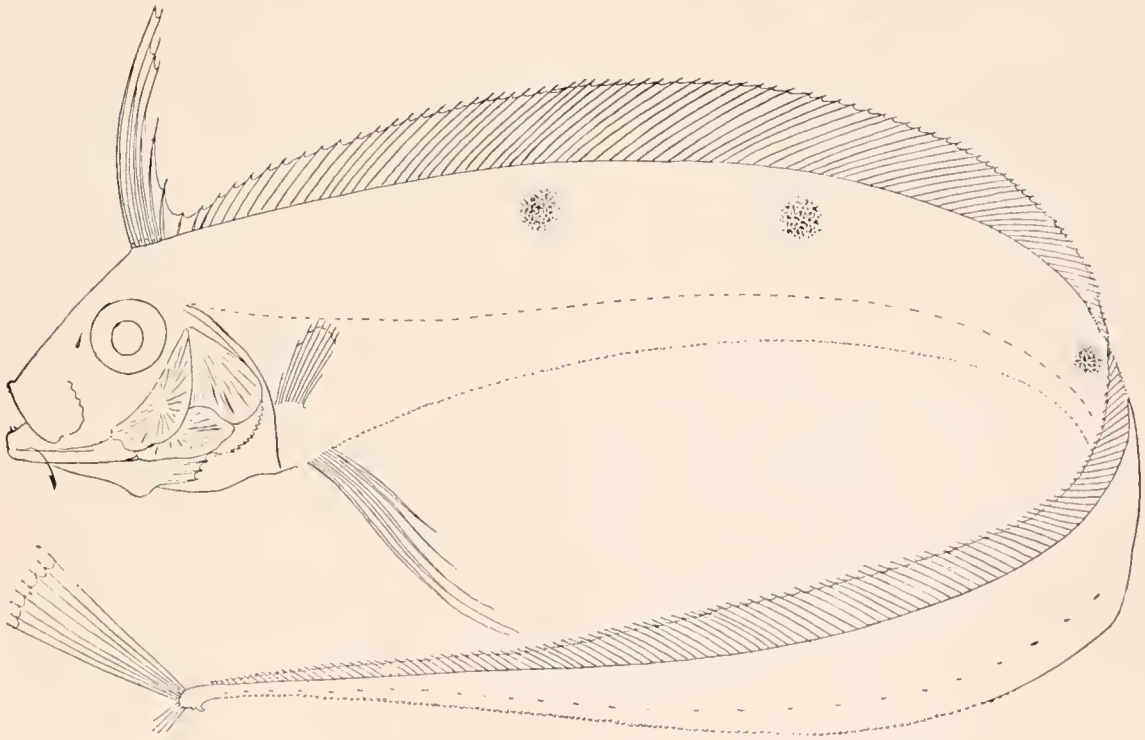
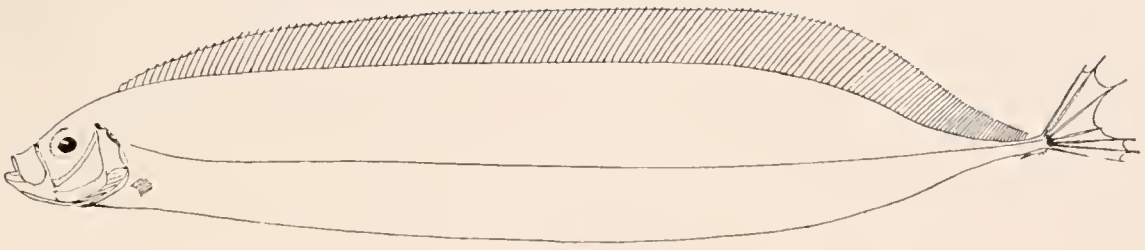


391

389. Lophotes Cepedianus. (p. 349.) 390. Lophotes Capellei. (p. 351.)
391. Trachypterus iris. (p. 477.)



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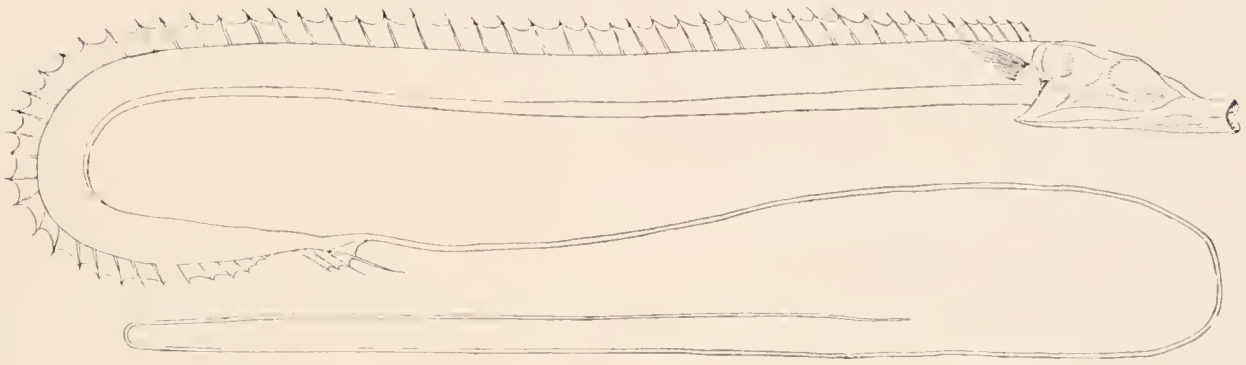

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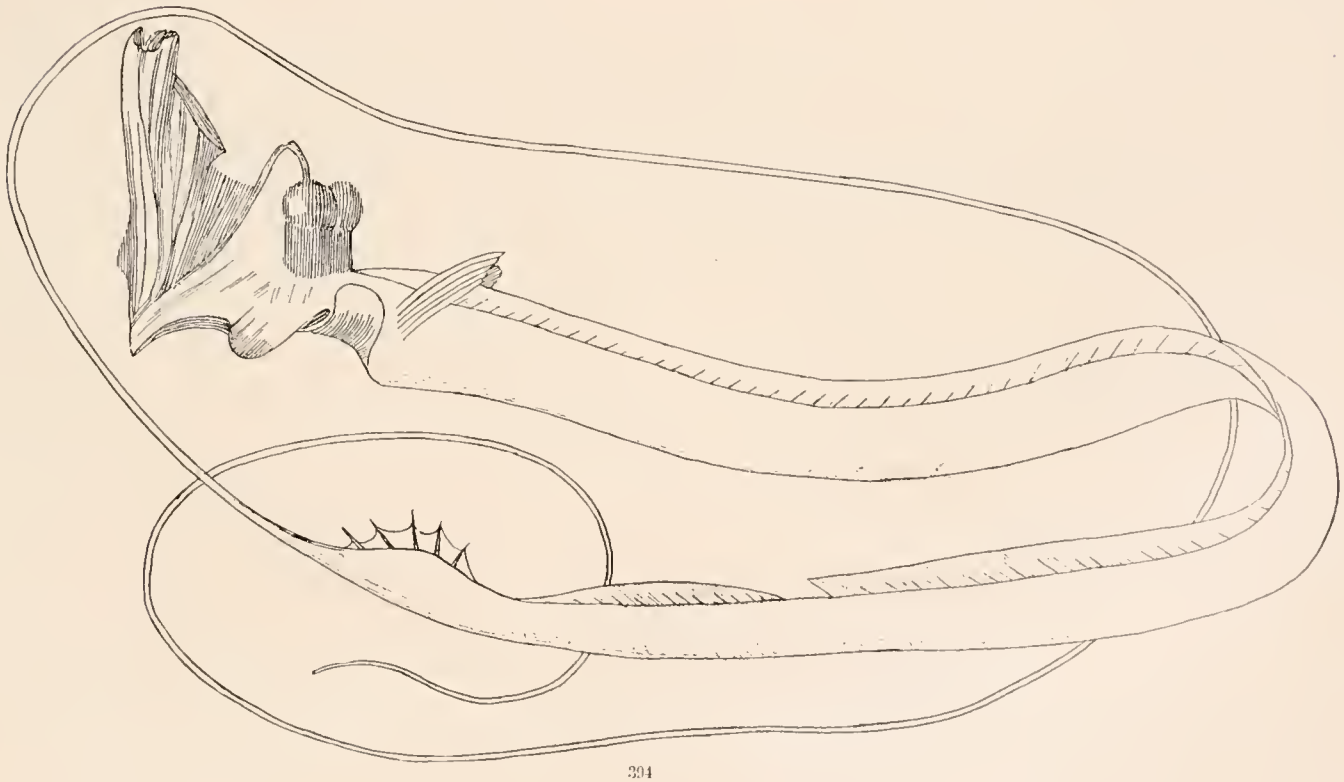
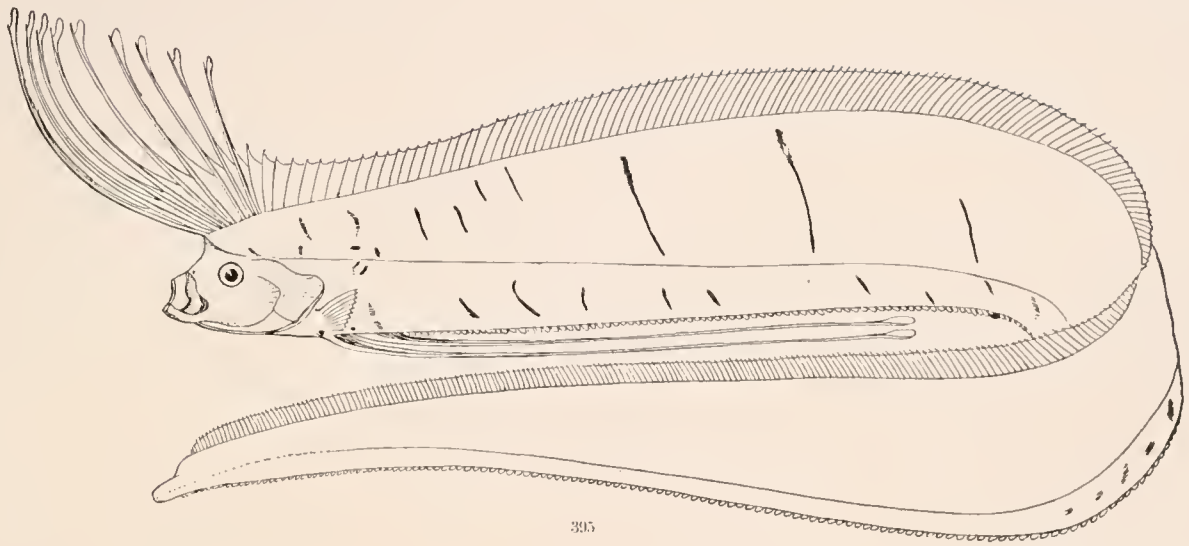


394

392. Trachypterus arcticus. (p. 479.) 393, 394. Stylephorus chordatus. (p. 482.)



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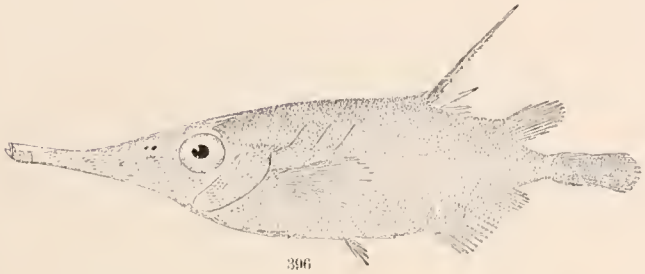

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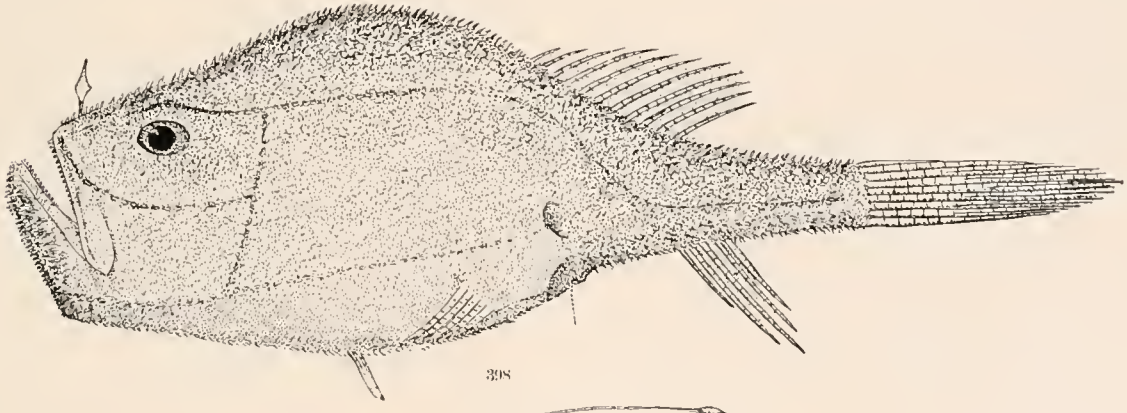
397



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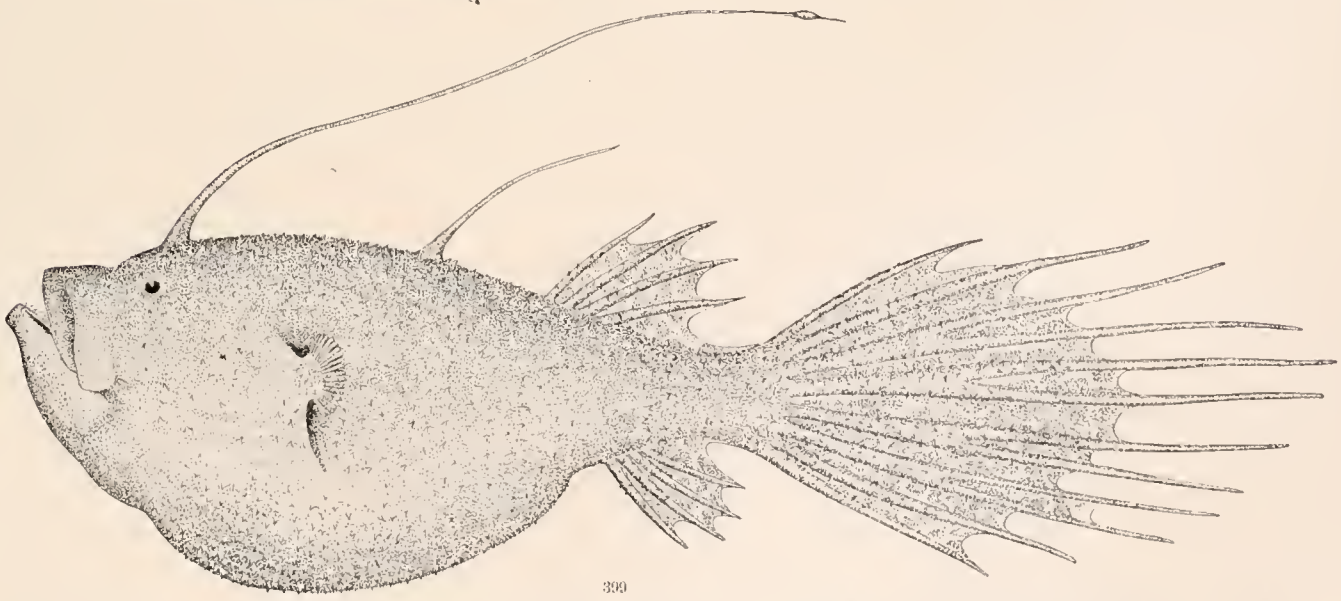
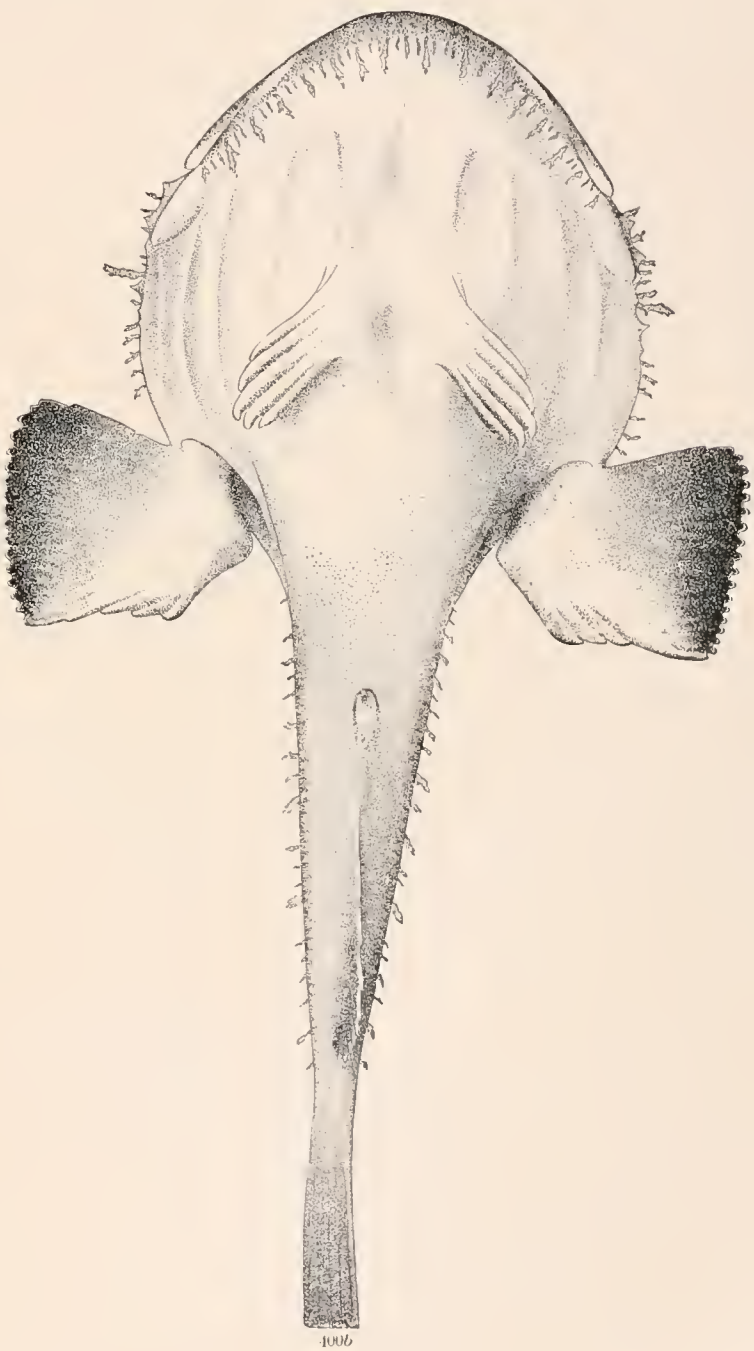


399

395. Regalecus glesne. (p. 480.) 396. Macrorhamphosus scolopax. (p. 483.) 397. Aulostoma longipes. (p. 484.)
398. Chaunax pictus. (p. 487.) 399. Ceratias Holbölli. (p. 489.)

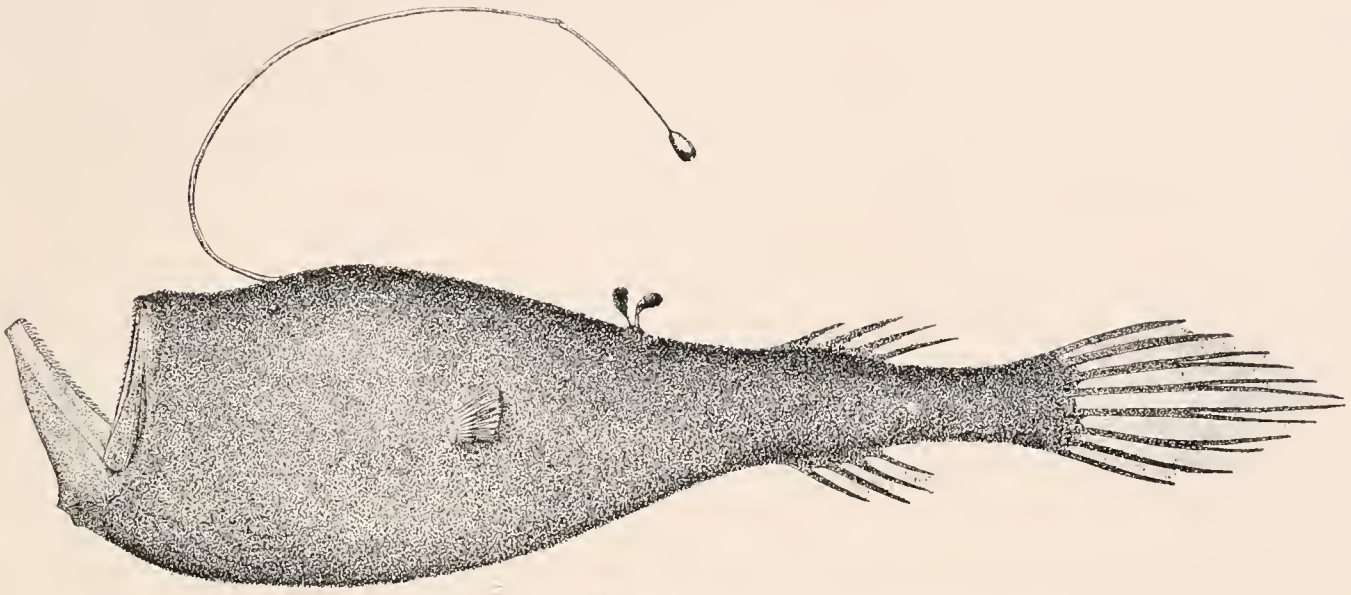
400

400a



400b

400, 400*a*, *b*. LOPHIUS PISCATORIUS. (p. 485.)



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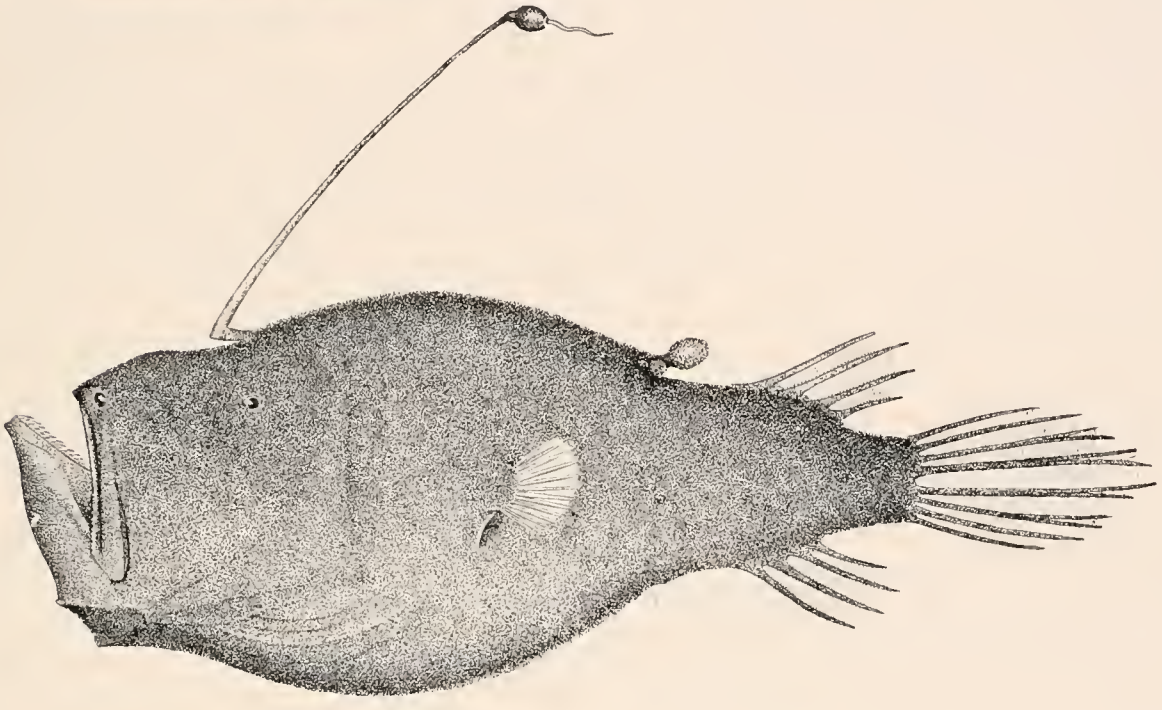

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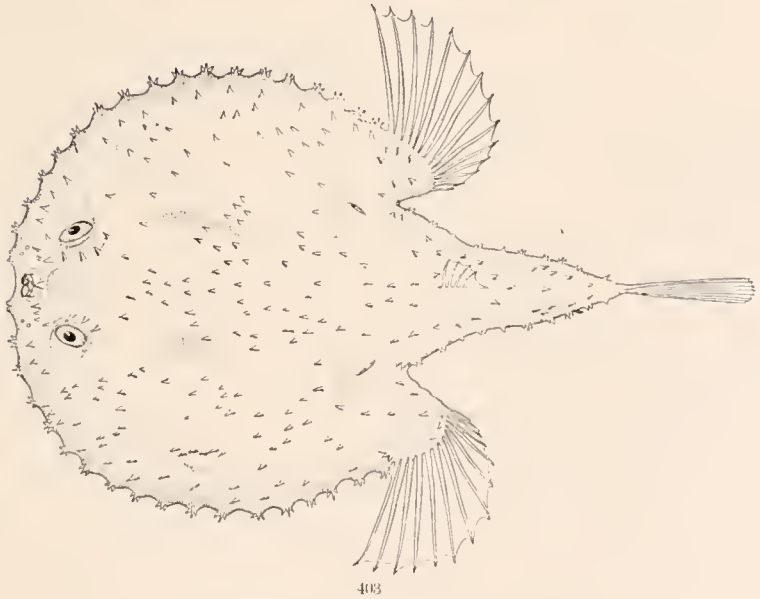
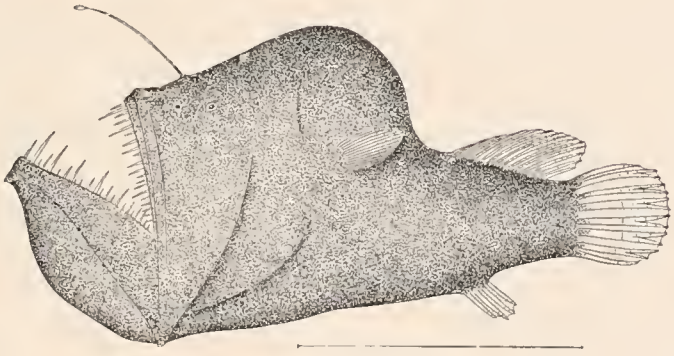


403

404

401. Mancalias Shufeldtii. (p. 490.)
402. Cryptopsaras Couesii. (p. 491.)
403. Halieutæa stellata. (p. 499.)
404. Paroneirodes glomerosus. (p. 493.)

405



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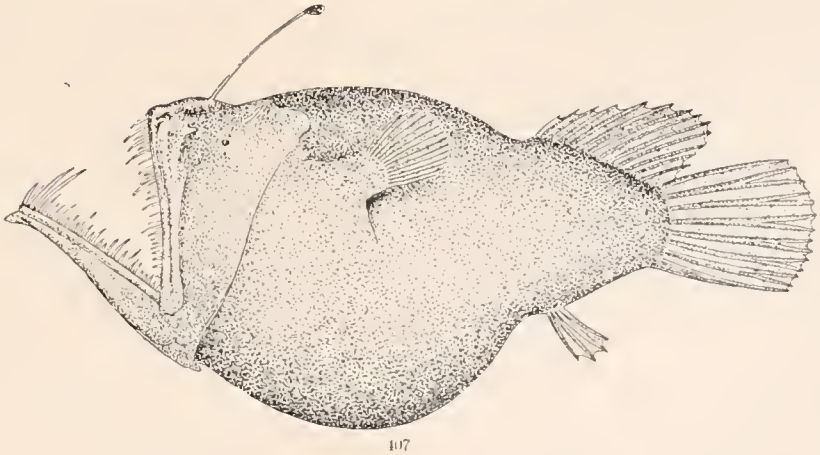
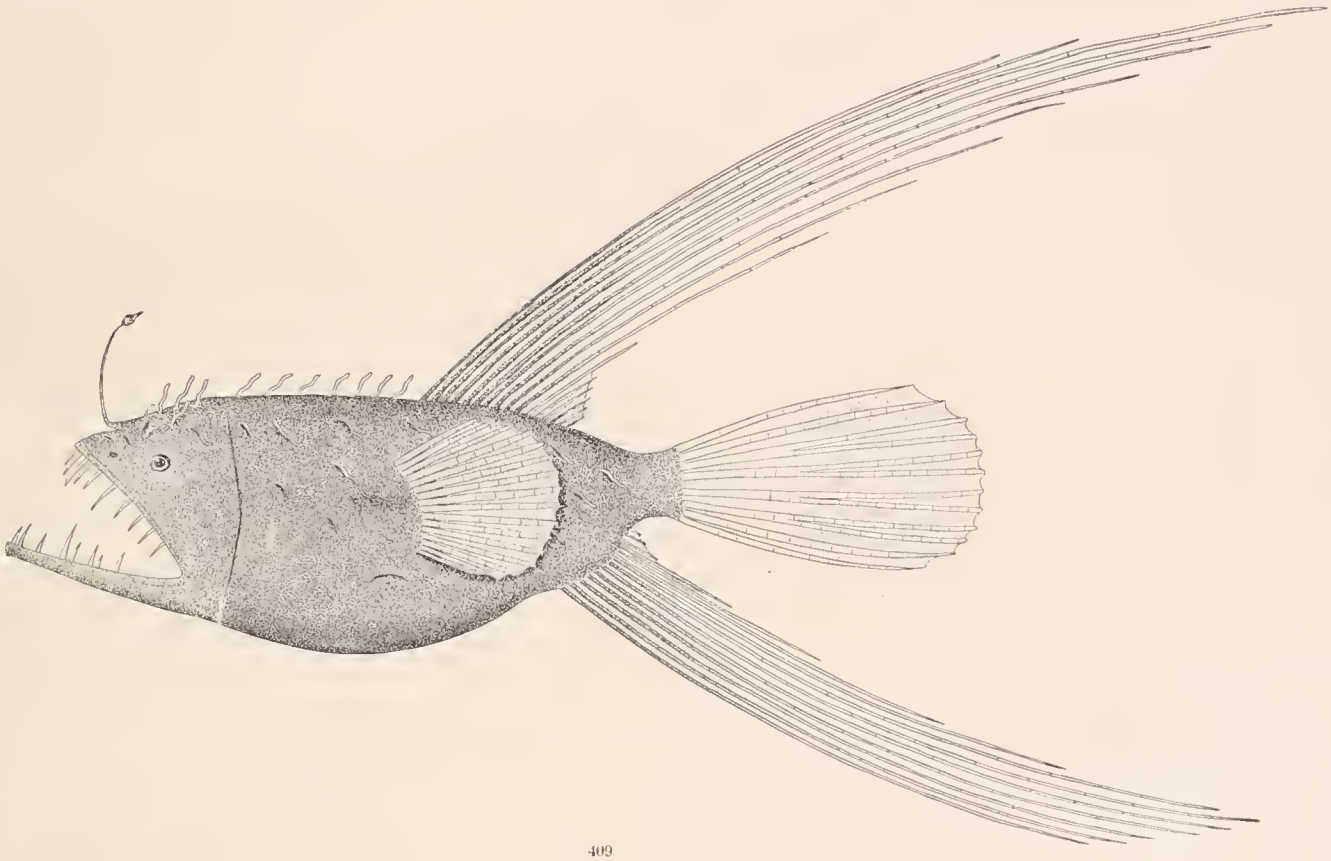


407

405. Corynolophus Reinhardtii. (p. 494.) 406. Melanocetus Johnsonii. (p. 494.)
407. Liocetus Murrayi. (p. 495.)

408



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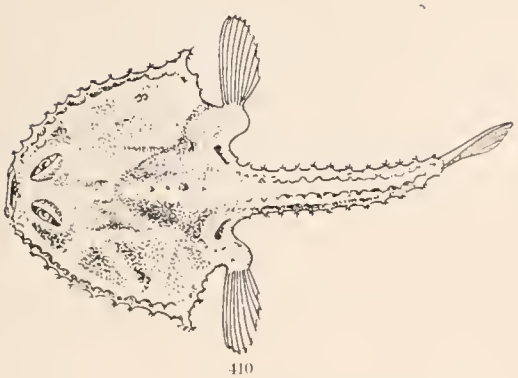
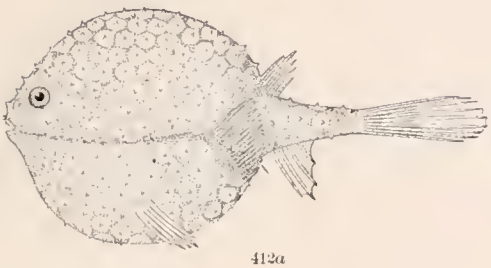


410

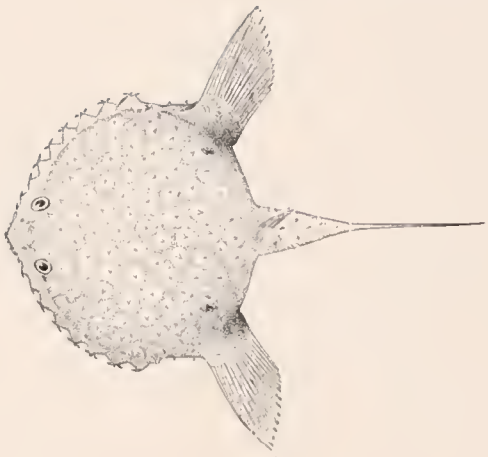
411

408. Linophryne lucifer. (p. 496.)
410 Halieutæa coccinea. (p. 500.)

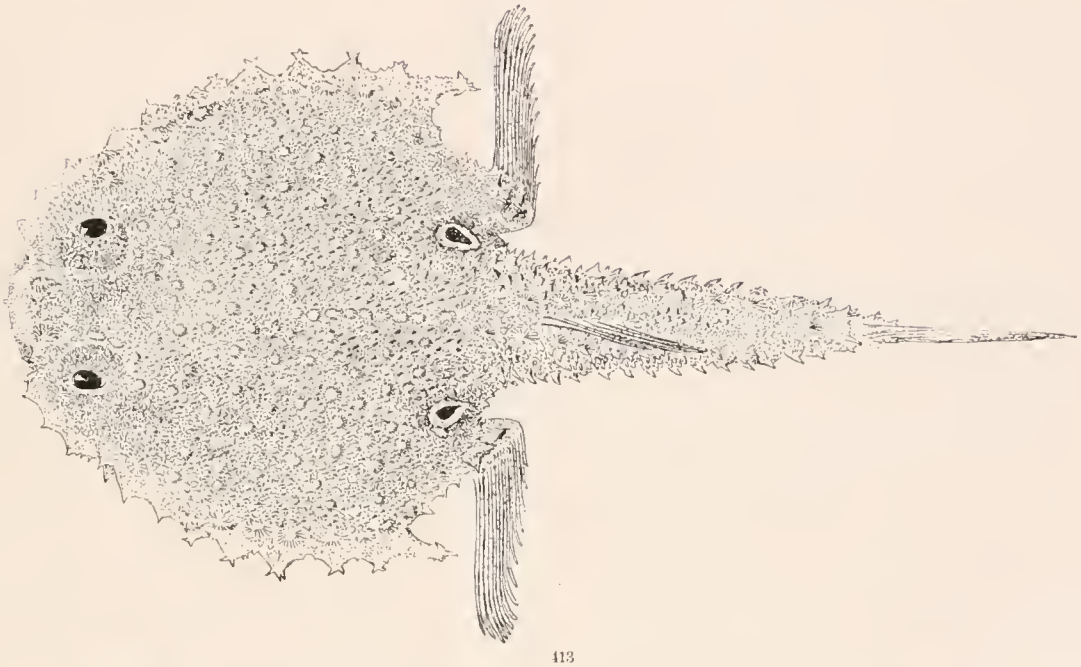
409. Caulophryne setosus. (p. 496.)
411. Malthopsis luteus. (p. 529.)



412*a*



412*b*



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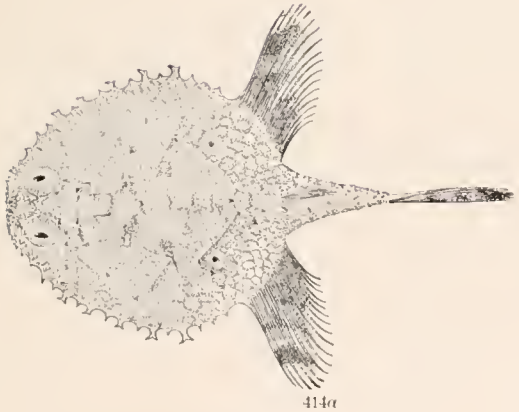
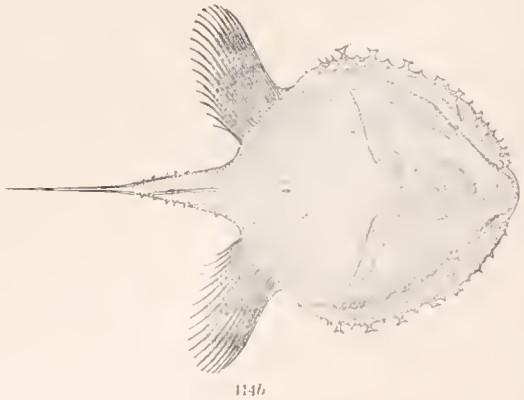
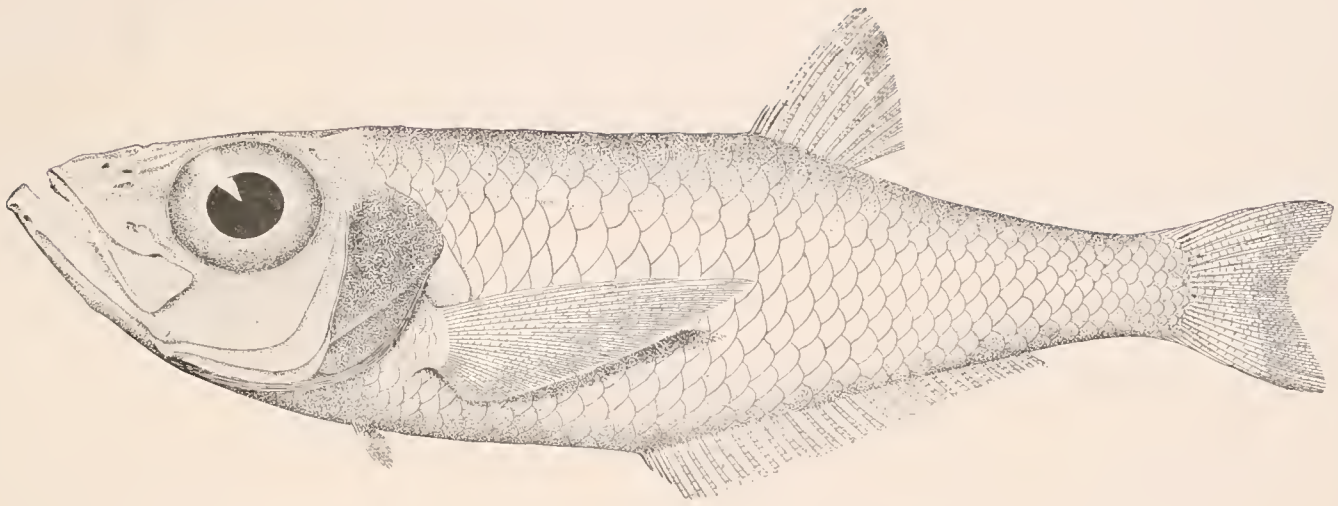


414*a*



414*b*

412*a*, *b*. Halieutella lappa. (p. 500.)
413. Dibranchus atlanticus. (p. 501.)
414*a*, *b*. Halieutichthys aculeatus. (p. 504.)



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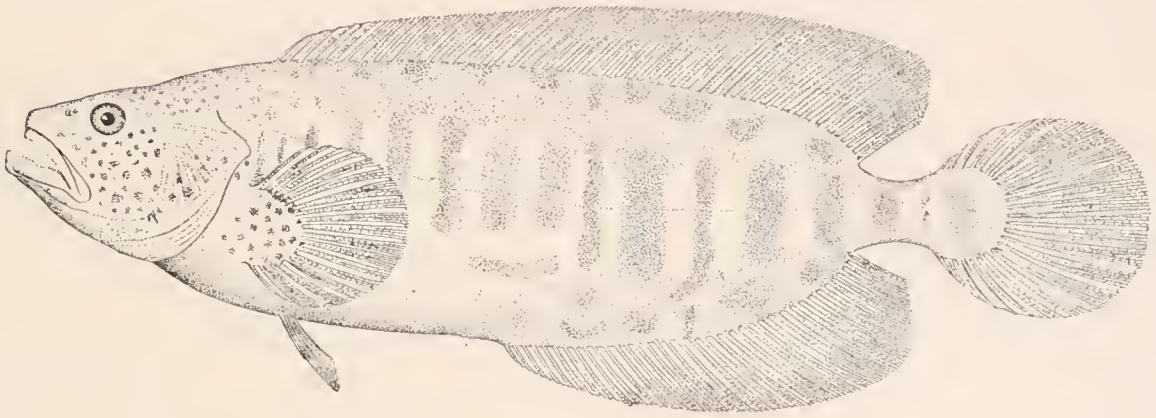

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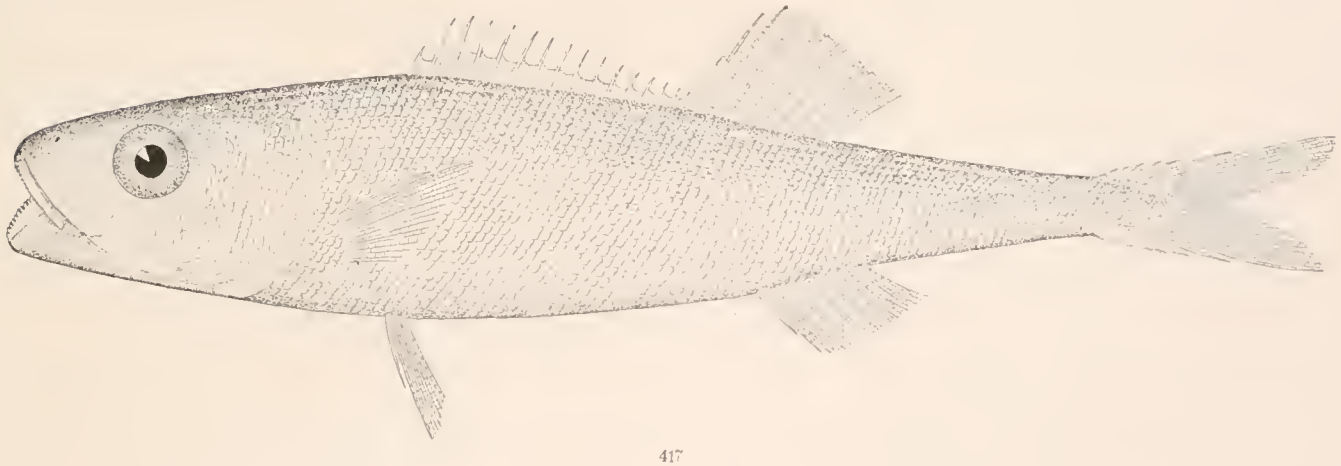

417

415. Bathyclupea argentea. (p. 190.) 416. Schedophilopsis spinosus. (p. 216.)
417. Tetragonurus Cuvieri. (p. 230.)

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